

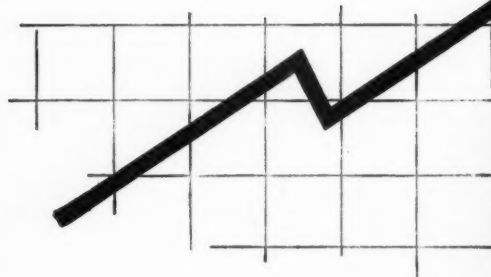
Modern packaging



Nominated for *Packaging's Hall of Fame* Story on Page 96

April 1952

Why are large quantity GLUE USERS turning to Aqua-Flakes?



... make glue
at your desk
and see!

AQUA-FLAKES start as a complete liquid adhesive. Ready-for-use. We remove the water by a special process. When you replace it, all of the original adhesive qualities return.

— better than liquid adhesives!

AQUA-FLAKES, a dehydrated liquid dextrin adhesive, save up to 60%. There's no water to pay for. No freezing problems in use or in storage.

— better than old-fashioned cold water solubles!

AQUA-FLAKES take the guesswork out of preparation. Eliminate "lumpy" mixtures . . . complicated, time-wasting formulas.

— better than "cook-ups"!

AQUA-FLAKES are prepared in minutes not hours. No heating or cooling necessary. No costly equipment. Just add to water for a



quality adhesive with lightning tack . . . beautiful filming properties.

Proof? Make a batch at your desk! We'll supply an AQUA-FLAKES sample . . . a stirring rod . . . and a handy measuring glass — if you'll mail the coupon!

Viscomat equipment is designed to prepare AQUA-FLAKES solutions — automatically — in any quantity, to any viscosity. For fabricating, sealing, and adhering paper containers and other paper products.

If you are a large user of industrial adhesives, you should be interested in AQUA-FLAKES.



270 Madison Ave., NEW YORK 16; 3641 So. Waukegan Ave., CHICAGO 32; 735 Battery St., SAN FRANCISCO 11; and other principal cities. In CANADA: National Adhesives (Canada) Ltd., TORONTO and MONTREAL.

I'D LIKE TO SEE whether AQUA-FLAKES are easier to prepare, more economical than my present adhesives. MP

- ☐ Please send an AQUA-FLAKES test kit
☐ Please have a National representative call on

Mr. _____

Company _____

Address _____

City _____

Zone _____

State _____

PLASTAFOL

NEW TRANSPARENT PACKAGING BY **GAIR**

A Sales Sensation!

This new GAIR PLASTAFOL packaging which is a combination of Rigid Plastic with GAIR famous CARTONS is an outstanding achievement in the folding carton industry.

GAIR PLASTAFOL combination carton is definitely a SELL-ON-SIGHT package with a large area for product visibility. The ingenious transparent panels are so sturdy and rigid that it will not crinkle or break even when the cartons are used for mass displays on the counter, shelf or windows. PLASTAFOL is a sales-promotion masterpiece.



ROBERT GAIR COMPANY, INC. 155 EAST 44th STREET, NEW YORK • TORONTO
PAPERBOARD • FOLDING CARTONS • SHIPPING CONTAINERS

APRIL 1952

Modern packaging

Vol. 25

No. 8

April 1952

General

- The war on costs** 81
Through standardization, mechanization and organization, Sharp & Dohme has won a victory that should inspire others to fight on.
- The novelty package** 85
Sportsman "golf bag" provides a gadget container to catch the impulse gift trade.
- Magazine-cover cartons** 86
Kellogg's new cereal packages can be as newsy as the morning paper, yet never lose the strong identity of a family format.
- Portion control** 90
That's Kraft's name for a significant new method of packaging individual servings of jams and jellies in formed vinyl containers.
- Harperana** 92
I. W. Harper's present decanter is the descendant of a long line of special-design bottles.
- Shopper-participation display** 95
W. M. Barr's corrugated shipper sells paint specialties by letting customer try them.
- Carnation Evaporated Milk** 96
This month's nominee to *Packaging's Hall of Fame* is the world's biggest selling canned food item; its package, perfected 50 years ago, is today's ideal of protection with economy, and made possible limitless distribution of milk.
- Small packager** 103
Restaurant's marketing of frozen specialty shows that hand operations can be efficient.
- Design Histories** 104
Recipe packages for colored margarine . . . gift-ribbon merchandiser . . . visibility carton for paper crab shells . . . acetate "powder palette" for blending face powder.
- Do package shapes have recognition value?** 106
56.7% of the 12,567 contestants correctly identified these 25 unlabeled perfume bottles.
- Versatile deal** 108
La France builds up to introduction of new economy size with package design program that has wide merchandising flexibility.

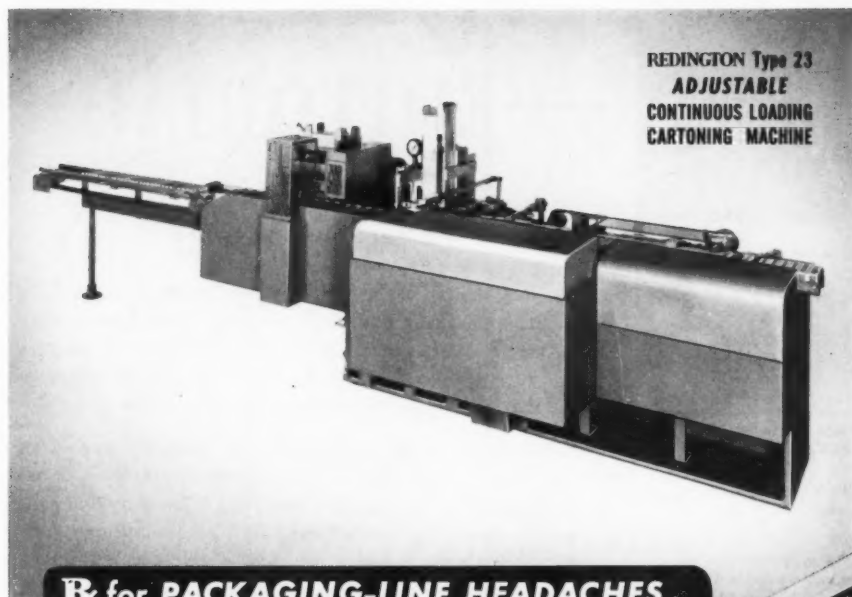
- Packaging Pageant** 112
Tear-tape opening for bouillon-cube wrap . . . distinctive new bread wrap doubles sales . . . fractional package for ready-to-eat popcorn . . . other new packaging ideas.
- Carriage-trade plastics** 114
New Erno Laszlo cosmetics adopt all-plastic containers in keeping with their high-quality approach.
- Non-stick machine parts** 116
Teflon-finished rollers, sealers and hoppers offer freedom from costly clean-up.
- Educational cartons** 119
Union Pharmaceutical gets across two new sales stories with planned counter displays.
- Display Gallery** 120
Self-service yeast merchandiser . . . de luxe counter case creates complete men's toiletries department . . . flasher display utilizes vinyl-coated board . . . more point-of-sale units.
- Folding-box awards** 122
Box makers' best are chosen from 2,776 entries, outstripping last year's record by 102%.

Technical

- Engineering a cushioned package** 129
Design calculations need not be complex, if load-compression characteristics of cushioning are known. BY JOHN L. GRETZ.
- More PI proposals** 134
Committee invites discussion of suggested methods for testing alkali effect, light-fastness and product resistance.
- Questions and Answers** 138

Departments

- Equipment and materials** 140
- Plants and people** 148
- For your information** 158
- Washington review** 164
- U. S. patents digest** 168



**REDINGTON Type 23
ADJUSTABLE
CONTINUOUS LOADING
CARTONING MACHINE**

★
Did you
see this
machine
at the
Show?
★

R for **PACKAGING-LINE HEADACHES . .** **REDINGTON Automatic Cartoning**

ALKA-SELTZER CARTONS BOTTLE, CIRCULAR AUTOMATICALLY . . and FAST

This REDINGTON Type 23 keeps a constant stream of cleanly-cartoned packages flowing for Miles Laboratories, Inc., Elkhart, Indiana . . keeps them flowing steadily . . at high speed . . automatically. Here is the operation:

Filled, capped and labeled bottles lying flat on the intake belt are picked up in individual pockets of a conveyor. As each bottle approaches the loading point, the REDINGTON automatically feeds a circular from the flat stack in the magazine, gives it the correct number of folds, and places it over the top and down the sides of the bottle. Flat cartons are then fed from their magazine, expanded, and the bottle and circular inserted. The machine finishes the pack by tucking in the end flaps. Speed up to 200 per minute is normal. A single operator handles the entire operation.

REDINGTONS of this type are supplied to handle bottles, tubes, jars, vials or almost any solid item — many with special mechanisms for extra performance such as gluing, corrugated liner feeding, etc. Automatic cartoning, wrapping or special packaging (REDINGTON makes machines for all these purposes) can be a paying investment for you, as it is for Miles Laboratories . . especially when you get the extra dividends of low maintenance and long productive life REDINGTON assures you with such important and unusual construction features as One-Piece Cast Iron Frame . . Shafting turning in Self-Aligning Roller Bearings . . and many others.



★
Tell us what you package. REDINGTON engineers have developed better packaging of everything from codfish to razor blades. They can make specific suggestions for bettering your production . . and lowering your costs. Write us today!
★

F.B. ~ Since 1897 ~
REDINGTON
CO. 110-112 So. Sangamon St., Chicago 7, Ill.

**AUTOMATIC MACHINES
for
CARTONING
WRAPPING
SPECIAL PACKAGING**

Modern packaging

President and Publisher
CHARLES A. BRESKIN

Editor
LLOYD STOUFFER

PEARL HAGENS, *Managing Editor*
C. A. SOUTHWICK, JR., *Technical Editor*
GLADYS TARRAGANO, *Associate Editor*
WILLIAM C. SIMMS, *Associate Editor*
VAL WRIGHT, *Midwest Editor (Chicago)*
FLORENCE GETTER, *Reader Service Editor*
DONALD R. RUTHER, *Art Director*
H. A. LEVEY, *Patents*

Advisory Editor
C. W. BROWNE

BUSINESS STAFF

ALAN S. COLE, *V. P. and General Manager*
P. H. BACKSTROM M. A. OLSEN
B. W. GUSSOW S. S. SIEGEL
Chicago: J. M. CONNORS, *Manager*
W. F. KENNEDY
Cleveland: R. C. BEGGS
Los Angeles: JAMES C. GALLOWAY
London, England: L. H. DOLARO
DANIEL M. BROADS, *Production Manager*
B. J. FARINA, *Asst. Production Mgr.*
LYNN B. KAHN, *Production*
PHILIP W. MULLER, *Asst. General Mgr.*
H. FRIEDMAN, *Promotion Manager*
FREDERICK A. KLEIN, *Circulation Mgr.*
T. B. BRESKIN, *Assistant to the Publisher*

EXECUTIVE AND EDITORIAL OFFICES:
375 Madison Ave., New York 22; Telephone
—Plaza 9-2710.

BRANCH OFFICES. Chicago, 101 E. Ontario St., Chicago 11, Ill.; Tel.—Delaware 7-0060. Cleveland, 815 Superior Ave., Cleveland 14, Ohio; Tel.—Superior 1-0737. Los Angeles, 816 W. Fifth St., Los Angeles 17, Calif.; Tel.—Mutual 8335. London, England, L. H. Dolaro, European Advertising Representative; 10, 11 and 12 Broad Street Ave., Blomfield St., London, E. C. 2, England; Tel.—London Wall 4231.

Modern Packaging published monthly by Modern Packaging Corp., at Emmett St., Bristol, Conn. Subscription \$5 for one year, \$8 for two years in United States and Canada; foreign, \$8 one year, \$12 two years, \$15 three years. All foreign subscriptions payable in United States currency or equivalent in foreign currency computed in current exchange by money order or by draft on a New York bank. Price this issue, 75 cents per copy (foreign, \$1). Copyright 1952 by the Modern Packaging Corp. All rights reserved including the right to reproduce this book or portion thereof in any form. Printed in U.S.A. Acceptance under Sec. 34.64 P. L. & R. at Bristol Conn. Authorized Dec. 21, 1950.

MODERN PACKAGING is regularly indexed in the *Industrial Arts Index*.



EDITORIAL

Peace and plenty?

PACKAGERS, ALONG WITH OTHER BUSINESSMEN, cannot help being puzzled by the swift upturn in the outlook for critical metals. Within recent weeks there have been numerous reports to the effect that warehouses are piled high with steel and that aluminum makers are looking for orders.

Only a few months ago there were alarming predictions that by now we would be in the depths of the defense shortages. The term "death sentence" was being used in forecasting drastically cut allotments for a long list of non-essentials. Then came a less severe term—"defense stretch-out." Now this is followed by today's bewildering reports of surpluses.

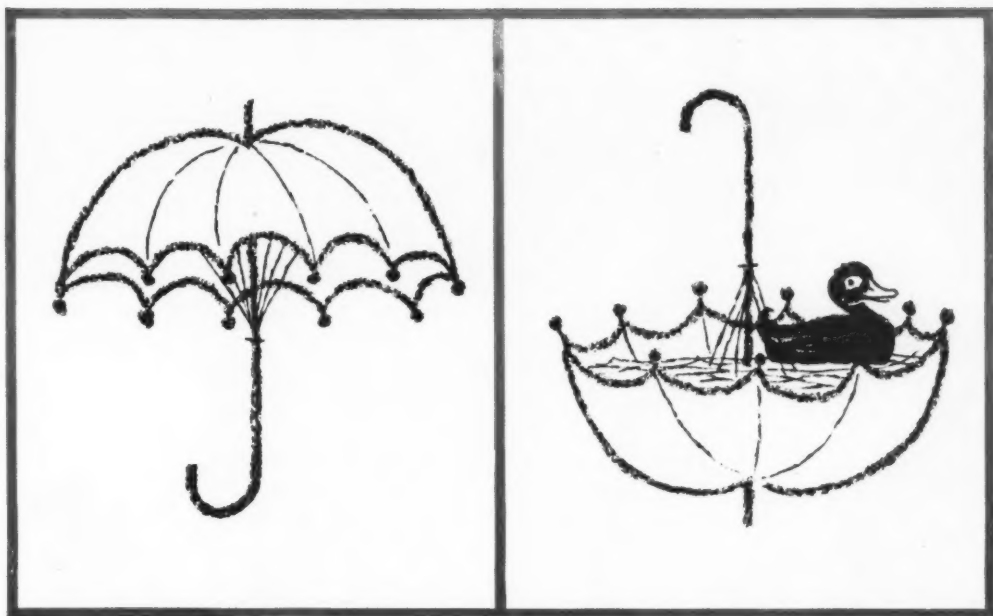
In some quarters the sudden reversal in the supply-demand relationship is attributed to the fact that the Air Force grossly over-anticipated its needs, with the result that sizable quantities of critical metals—such as the 25 million pounds of Air Force aluminum just released to DPA—are now being turned back for civilian use.

Regardless of what's behind the metals mystery—too much over-ordering by civilian and various defense groups or slackened consumer demand—it appears certain more metals will be available from now on. The quantities, it is thought, will be considerable and will include copper, aluminum and steel.

During the third quarter, as predicted by this magazine in its January forecast, new capacity will begin to make itself felt for a number of packaging materials. This expansion is the only sound basis for optimism. Otherwise, the packager should view the current situation with extreme caution. Major strikes or a sudden worsening of international tensions could make scarcities re-appear very fast.

The only safe policy for the alert packager is strict emphasis on sound ordering policies and a determined effort to maintain orderly normal inventories. Those who remember what happened during the lull in late 1949, followed by the mad Korean rush, will need no further cautioning.

The Editors



Keeps moisture out



Keeps moisture in



*Completely moistureproof . . . these two packages in colorfully printed Dobeckmun Metalam®. . . . One is Alka-Seltzer's famous retail unit and the other a unique "sampler" for Rexall. They're only two examples of hundreds in the drug industry today. Metalam laminated foil can help you merchandise *your* products with complete protection, at professional or retail levels, whether they be pills, powders, pastes or liquids. Just tell us your needs. We have packaging specialists in cities from coast to coast.*

The **Dobeckmun** Company, Cleveland 1, Ohio • Berkeley 2, California • Bennington, Vermont

John Dale OF ENGLAND

for quality containers

Collapsible tubes, metal
containers, closures to
your exact specifica-
tion—and made with
p-r-e-c-i-s-i-o-n



AGENTS IN INDIA

HOARE MILLER &
COMPANY LIMITED,
5 FAIRLIE PLACE,
P.O. BOX NUMBER 63,
CALCUTTA, I.

JOHN DALE
LIMITED

Another development using

B. F. Goodrich Chemical Company raw materials

Inside story of a better drum



**Geon latex coating protects
fiber wall against
grease, chemicals, moisture!**

B. F. Goodrich Chemical Co.
does not make these drums. We supply
raw materials for the coating only.

MANUFACTURERS who have problems of protecting walls of fiber drums against chemicals or greasy contents find this container the perfect answer!

Its interior is coated with Geon polyvinyl chloride latex. When the drum is used for shipping lubricating grease, for example, the Geon coating prevents the grease from penetrating the fiber wall. When the drum is used for shipping materials such as ion-exchange resins, the Geon coating prevents loss of moisture.

The Geon coating won't chip or flake off—can be easily washed clean—never contaminates the contents. It may be applied to either the interior or exterior of fiber drums.

There's a complete family of Geon latices. They're designed for specific requirements—have many uses in the packaging field. They resist heat, cold, aging, weather, wear—oil, grease, acids, and alkalis. Colors can be brilliant or delicate.

We make no finished products—supply raw materials only. But technical help is yours for the asking. Send for the Geon Latex Chart, and ask for the new booklet, "Packaging Problems Solved With Geon". Please address Dept. GL-4, B. F. Goodrich Chemical Company, Rose Building, Cleveland 15, Ohio. Cable address: Goodchemco.



GEON RESINS • GOOD-RITE PLASTICIZERS . . . the ideal team to make products easier, better and more saleable.

GEON polyvinyl materials • HYCAR American rubber • GOOD-RITE chemicals and plasticizers • HARMON organic colors

PERFORMANCE

Performance is the ultimate test of any product and performance supports our reputation for shipping the best waxes for use in the food packaging industry, for shipping them efficiently, and for maintaining consistently high quality.

We will be glad to consult with you, without obligation, on any waxing problem you may have.

M

M

MOORE & MUNGER

33 Rector Street

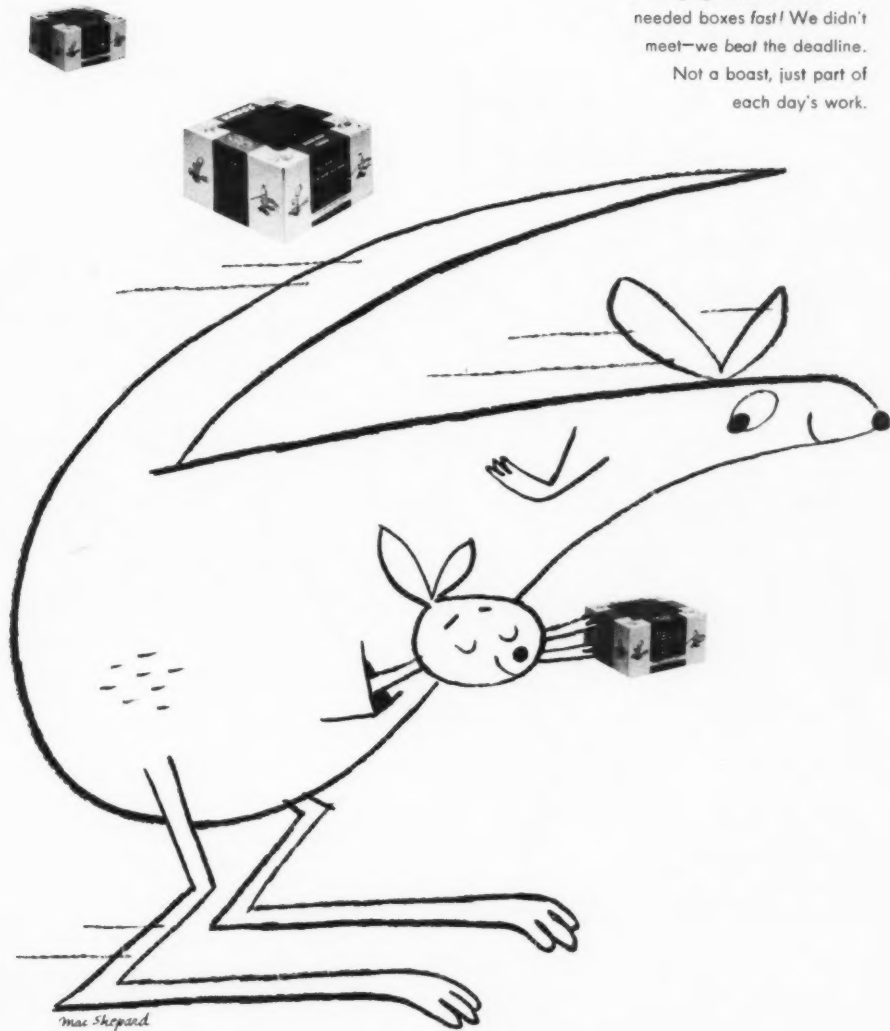
New York 6



delivered in a hurry!

And so is every folding paper box assignment given to Industrial Packaging. **KRUG'S** Bakeries needed boxes *fast!* We didn't meet—we *beat* the deadline.

Not a boast, just part of each day's work.



industrial packaging co., inc. Manufacturers of Folding Paper Boxes

1155 Manhattan Avenue, Brooklyn 22, New York




EVERgreen 9-5560

This wrapper almost talks!



**TYTON
SUPER SEAL
BREAD WRAPPERS**

Here's a bread wrapper that's bound to flag the attention of self-service store customers. Marathon's Tyton Super Seal takes clear, undistorted printing in bright, vibrant colored inks. It "pops out" from the grocer's shelf . . . calls out to the housewife to take home your brand of bread.

Contact your Marathon salesman, or write:
Marathon Corporation, Menasha, Wis. 

 **Marathon**
packaging that sells food

Tri-State Rigid Plastic Box

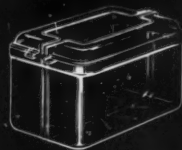


brightens Breyers slow-season sales

Quite naturally, ice cream sells best in summer. But Breyer Ice Cream Company felt that something could be done to iron out the slower season's sales "valley."

Then they found that our stock box No. C-79 was an ideal container for Breyers half-gallon bulk pack. The glistening, transparent, rigid plastic had sales appeal. The insulation quality and practically air-tight seal kept the ice cream in perfect condition, even when removed from the freezer for serving. And women liked the bonus value of the box for innumerable uses in home freezers and refrigerators.

This winter, Breyers presented our Frigid-Box at a modest tie-in price with their half-gallon freezer package. Ice cream sales increased. The cold weather ice cream jinx was chased, and because of the consumer appeal of the "premium", its cost to Breyers was liquidated.



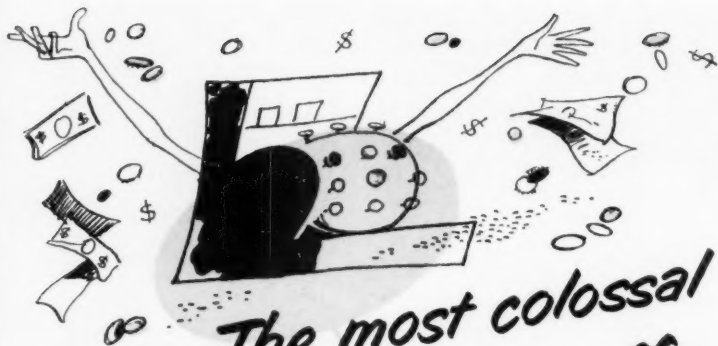
OUR STOCK BOX NO. C-79 (5 1/2" x 7 1/2" x 3 3/4") provides Breyers with a perfect premium package for stimulating ice cream sales. Whether you package dairy products, foods, tobacco, confections—class or mass merchandise of any kind—there's a Tri-State Rigid Plastic Box to fit your product, build your sales, simplify your packaging operations. If we cannot fill your needs from our wide variety of stock sizes and shapes, we'll mold to your specifications.

The Best Rigid Plastic Boxes are Injection Molded by



TRI-STATE PLASTIC MOLDING CO., Inc.
HENDERSON 2, KENTUCKY

NEW YORK: 12 E. 41st St., Murray Hill 3-6572 CHICAGO: 176 W. Adams St., Franklin 2-7292



The most colossal Package Pay-off in film history!

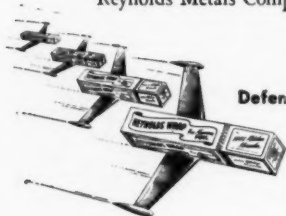
If that caption sounds like a movie ad, well it might. For the success of Ansco's new film package has been "colossal." It was the answer to an ever-present sales problem...customers refusing near-expiration film...retailers returning expired stock.

Ansco engineers remembered the hermetically sealed vapor barrier they had used for film shipments to the South Pacific in World War II. They asked themselves: Why not wrap a roll of film in such a pack and eliminate the dating system that hampered sales? Better still, why not wrap three rolls of film in one all-weather pack and sell them as an economy unit?

They worked it out with Reynolds. The result is Ansco's new package made of Reyseal 502...a lamination of aluminum foil, paper and wax that insures film freshness for years...permitting full guarantee without dating. The brilliant beauty of this package is self-evident.

The pay-off in sales is summarized on the facing page. It is a success story unique in film merchandising. But the story is paralleled in many other fields...cereals, cookies, dried fruits, butter, margarine, cleansers, etc., etc. For future sales, plan now with Reynolds packaging engineers.

Reynolds Metals Company, General Sales Office, Louisville 1, Ky.



**Defense needs limit Reynolds Wrap
... Return Flight Guaranteed!**



REYNOLDS ALUMINUM

"The Kate Smith Evening Hour" on Television, Wednesdays—Tallulah Bankhead in "The Big Show" on Radio, Sundays—NBC NETWORKS



1.
In the first
year... 1951...
sales increased
phenomenally!

2.
This packaging
uses 30% less foil,
47% less newsboard,
22% less
cellophane!

3.
Package savings
made possible a
15¢ cut in 3-unit
retail price!

4.
Package savings
"prepay" cost of
new machinery!

5.
Greater
eye-appeal of
color-printed foil
keeps sales
climbing!

"Tape simplifies your can and tube sealing! New folder tells how."



SEE FOR YOURSELF how many well-known manufacturers all over the country are turning out better-looking, tighter-sealed products with "Scotch" Pressure-Sensitive Tapes. These easy-to-apply tapes solve production problems, cut unit costs and speed up worker output.

The coupon below will bring your free copy of a helpful new folder on Can, Tube and Bottle Sealing. Send it in today!



VOLATILE inks and chemical solutions are sealed easily, safely with tight-sticking "Scotch" Brand Pressure-Sensitive Tapes. No drying out or leaking of contents with this lasting seal.



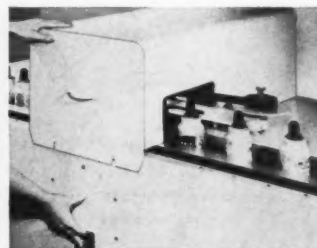
FIBRE SHIPPING TUBES, shell canisters, large cans are sealed with this simple machine. "Scotch" Acetate Fibre Tapes adhere securely with slight pressure, provide a tight, permanent seal.



DECORATE your container, seal in the freshness of your product with colorful "Scotch" Cellophane Tape. Available in 13 vivid colors besides the familiar transparent variety.



SEAL small cans in a wink with the help of this Type CD Banding Fixture. Applies a neat, uniform strip of tape with a single circular motion by the operator.



HIGH-SPEED quantity production calls for this automatic Bottle and Can Sealer, which turns out one unit every 1 1/2 seconds. Machine is custom built to your needs and specifications.

Minnesota Mining & Mfg. Co.
St. Paul 6, Minn.

Dept. MP-42

☐ Please rush copy of folder on Can, Tube and Bottle Sealing. ☐ Have a representative call.

Name.....

Title.....

Firm.....

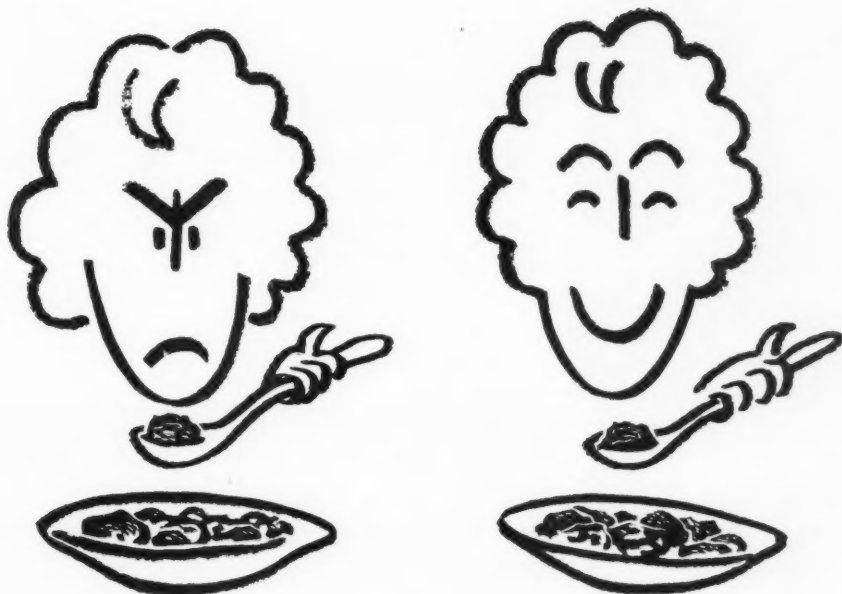
Address.....

City..... Zone..... State.....



The term "Scotch" and the plaid design are registered trademarks for the more than 200 pressure-sensitive adhesive tapes made in U.S.A. by Minnesota Mining & Mfg. Co., St. Paul 6, Minn.—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: 270 Park Ave., New York 17, N. Y. In Canada: London, Ont., Can.



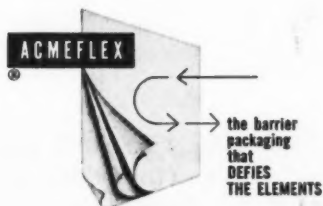


same product... same customer

ACMEFLEX[®] *makes the difference!*

Acmeflex is science's new invention for the preservation of your product. Acmeflex is more than just a protective packaging material. It is a barrier between your product and the elements of the outside world . . . the elements that would change the taste, fragrance, freshness, dryness, or just plain goodness of your product. Acmeflex can be engineered to the specific requirements of your product, and is designed for high speed packaging equipment. Samples to solve your own problem are available without obligation.

Write Dept. MP1.



ACME BACKING CORP.

Brooklyn 6, New York



This is the "Standard" for Stamina

The runner who covers the mile
in close to four minutes
sets a standard for stamina
that few can equal.

This is the "Standard" for Package Printing

Holsum Honey Wheat Bread
is sold throughout
the Southwest.
Its Standard-printed
three-color cellophane wrap
is known in every grocery
in this area.



Standard **printing company**
PRINTERS OF CELLOPHANE, ACETATE and GLASSINE SINCE 1936
COLUMBUS, GEORGIA

Sales Offices: Dallas, Texas—Charlotte, N. C.—Jackson, Miss.

MODERN PACKAGING



MILLS PLASTIC Bottles shape up to build product sales

CUSTOM BOTTLES—Give free play to your imagination in planning the use of custom shaped ~~CHAMBERLAIN~~ BOTTLES for your products. By combining our engineering and molding skill with our exclusive patented process, we can produce bottles in a surprisingly wide variety of shapes and sizes—and in virtually endless colors. We also make closures and atomizers designed to meet your special needs.

STANDARD BOTTLES—Feather-light Polyethylene standard bottles are available in two styles: Mills "Cylinder" in 2-4-6-8 ounces; Mills "Oblong" in 2-4 ounces. Both of these standard styles are available in natural Polyethylene or in your preferred color. Atomizers, closures and tubing are also available in standard styles and sizes.

Let us or our sales agent show you how we can create product selling bottles for you today.

Manufactured under Patent No. 2,515,093.
Other patents pending.

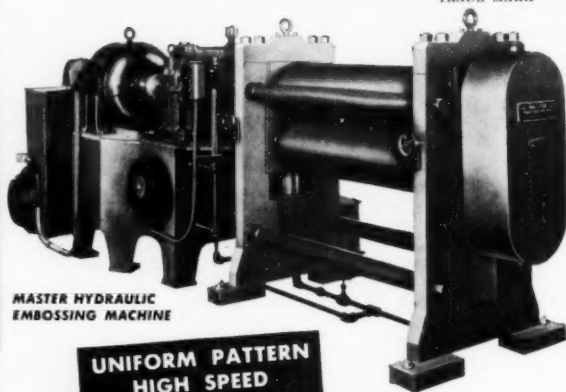
ELMER E. MILLS CORPORATION
2930 NORTH ASHLAND AVENUE • CHICAGO 13, ILLINOIS

Sales agent for the United States: **W. BRAUN & CO., CHICAGO:** 300 N. Canal St. • **NEW YORK:** 715 Fifth Ave.
DETROIT: 139 W. Maple, Birmingham, Mich. • **ST. PAUL:** 2109 Village Lane

MEET THE ^{PAPER} WORLD OF TOMORROW *Ahead of Competition*

With the Greatest Development in History
for Producing "DUOTEX" Finished Paper

TRADE MARK



MASTER HYDRAULIC
EMBOSSING MACHINE

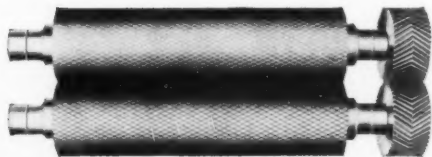
**UNIFORM PATTERN
HIGH SPEED
LOW COST**

U. S. Patent Pending

- Produces two-sided (reversible) finishes.
- Sets a new standard for paper finishing.
- Does not materially affect mullen, tear or tensile.
- "DUOTEX" finished paper is uniform, lays flat, saves press time.
- "DUOTEX" finish is ideal for offset and letterpress printing.

MASTER *Hydraulic* EMBOSSING MACHINE

with
ENGRAVED MATCHED HARDENED
FORGED STEEL ROLLS



ENGRAVED MATCHED HARDENED FORGED STEEL ROLLS

U. S. Patent Pending

Be Ready to Serve Your Customers Ahead of Competition • Write TODAY for Details!

MODERN ENGRAVING & MACHINE CO.

1413 CHESTNUT AVE., HILLSIDE 5, NEW JERSEY

COPYRIGHT 1952 MODERN ENGRAVING & MACHINE CO.
MODERN PACKAGING

"It's my job to help your product sell itself"

SAYS CHARLES A. QUINLAN
DU PONT CELLOPHANE REPRESENTATIVE



"**CONTINUING STUDIES** of consumer buying habits carried on by Du Pont on a nationwide scale can be a big help to manufacturers in planning a hard-selling package. I can bring the results of these surveys right to your desk...show you how they apply to your business."



"**EXPERIENCE** is a valuable teacher when it comes to package design. At Du Pont our staff of trained, experienced craftsmen study the packaging of a product in terms of the selling job the package must do. I'm ready to put this knowledge to work for you."



"**IN DU PONT LABORATORIES** our technicians are working constantly to improve the films we have and develop new ones. It's their aim to match the needs of each product with the proper transparent film. Their knowledge is at my disposal to help you."

All of Du Pont's packaging services are available to you through Charles Quinlan or any other trained and experienced Du Pont Cellophane representative. No matter what your packaging problem is, he'll be glad to help you. Call him today and turn his training and Du Pont's more than 25 years of packaging experience into profits for you. E. I. du Pont de Nemours & Co. (Inc.), Film Department, Nemours Building, Wilmington 98, Del.

DuPont Cellophane

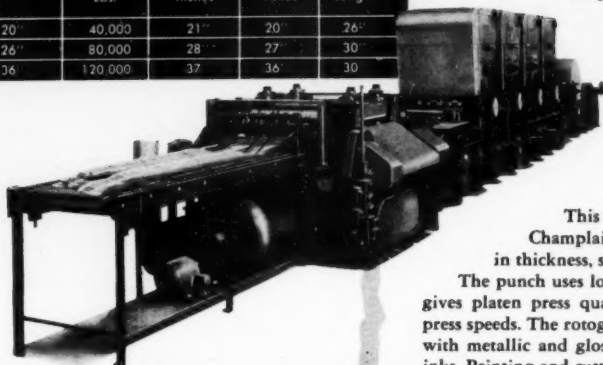


Shows what it Protects—Protects what it Shows

150th Anniversary

BETTER THINGS FOR BETTER LIVING...THROUGH CHEMISTRY

Model	Maximum Pressure Lbs.	Maximum Web Width Inches	Maximum Die Width Inches	Maximum Die Length
20"	40,000	21"	20"	26"
26"	80,000	28"	27"	30"
36"	120,000	37"	36"	30"



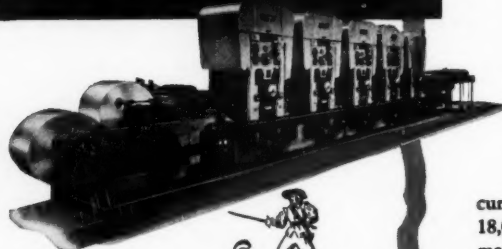
**Top quality printing...
top quality cartons...**

**Once through
the press!**

This one operation rotary carton press by Champlain handles roll stock up to 28 points in thickness, steps up production as much as 50%. The punch uses low cost steel rule and furniture dies, gives platen press quality scores at better than cylinder press speeds. The rotogravure press can coat, varnish, print with metallic and gloss inks as well as standard gravure inks. Printing and cutting registration is provided by electric push button control — or automatic registration at high speeds can be provided by Champlain electric eye control. Write today for complete information on top quality printing, cutting, automatic stripping of folding cartons... *once through the press.*

1455

SPECIFICATIONS			
Sheet Size	Max. width of sheet	Max. length	Min. length
14"	15"	18"	9"
20"	21"	26"	13"
26"	28"	34"	17"
36"	37"	34"	17"



**sheet delivery *Economy*
with high speed
Rotogravure advantages**

Champlain's Rotogravure Presses and Sheeters deliver instantly dried multicolor sheets two ways: to a slow-moving belt or to an accurately jogged pile delivery by synchronized positive grippers. Stock ranging from glassine to cardboard is accurately cut to $\pm 1/64$ tolerance at speeds up to 18,000 sheets per hour. Easily adjusted cutting mechanism delivers a complete range of sheet sizes. Printing and cut-off register is controlled by a running register mechanism. Automatic-eye control of register is also available with Champlain's Registor. Write for further information.

1461

CHAMPLAIN COMPANY, INC.

88 LLEWELLYN AVENUE, BLOOMFIELD, N. J.
CHICAGO OFFICE: 520 N. MICHIGAN AVE., CHICAGO 2, ILL.
*Champlain manufactures a complete line of roto-
gravure, aniline, rotary letterpress and allied
equipment for packaging and specialty printing.*



PLIOLITE NR starts with the finest grade of pure pale crepe rubber, shipped from plantations in bales like those shown. It has been successful in paper coatings and a wide range of industrial applications. Details on request.

For the finest paper coatings

use



ONLY the highest quality, low-protein-content rubber is used in the manufacture of PLIOLITE NR, the only cyclized rubber resin available commercially today. That means—in either coated kraft or glassine papers—you get all these advantages when you coat with PLIOLITE NR:

Excellent resistance to WVT—compared with other well-known coatings

Good crease resistance—even under multiple creasings

Good anchorage to various stocks—coatings will not strip

Good heat seals—in range of 275° to 300° F

High gloss; freedom from “blocking,” good “slip”

Low air permeability—excellent barrier to air and CO₂ diffusion

Simple formulation—needs no extensive modification

Economical—low density means use of fewer pounds per ream

Excellent stability—maintained over long periods

Uses single solvent—simplifies manufacture and solvent recovery

Check all these advantages. Compare—point for point—with the coatings you’re using today. Then write for full details, technical assistance and samples for your own evaluation to:

GOODYEAR, CHEMICAL DIVISION
AKRON 16, OHIO



GOOD YEAR

We think you'll like "THE GREATEST STORY EVER TOLD"—Every Sunday—ABC Network

Pliolite—T. M. The Goodyear Tire & Rubber Company, Akron, Ohio

APRIL 1952

21



Which Style
Onside Package
Meets Your
Product Need?



Flat Bag



Square Bag



Automatic



Sacchel Bottom



Envelope



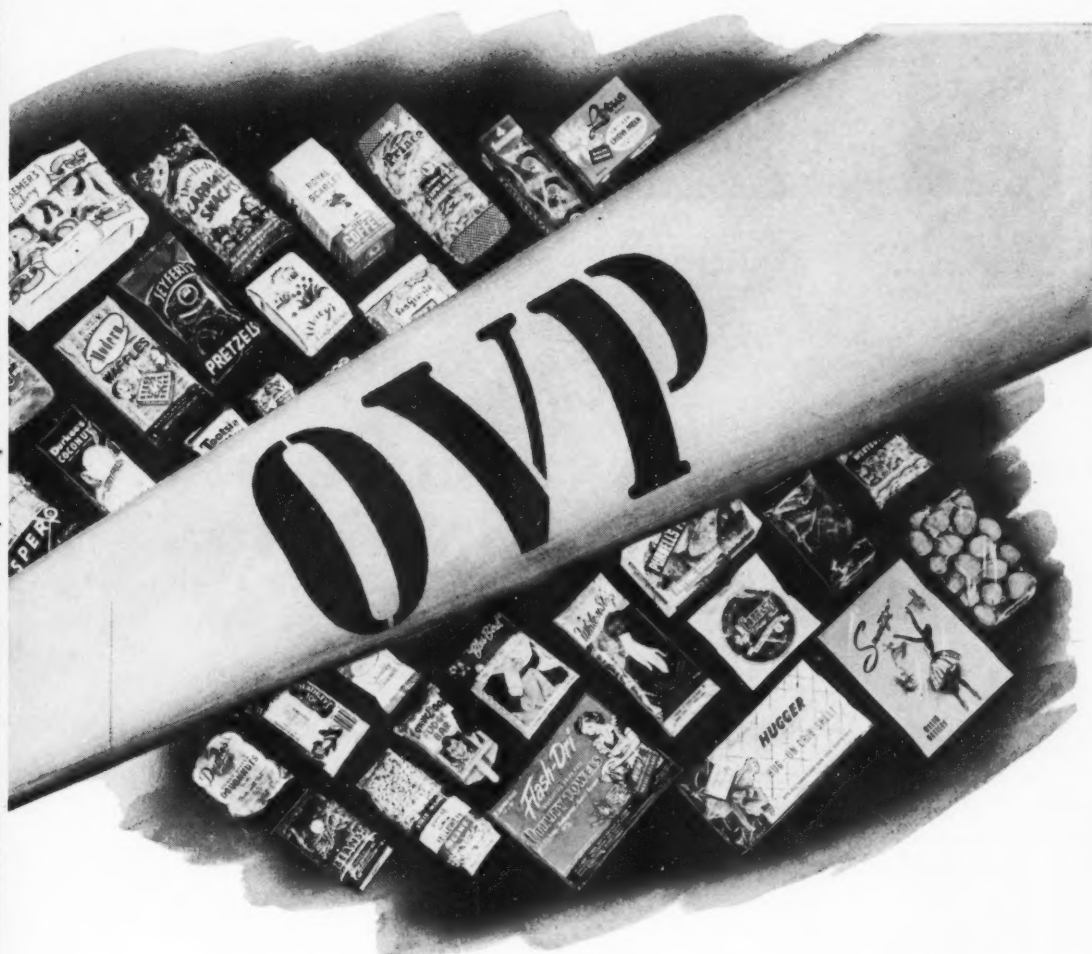
Window Full Face



Window Die Cut



Window Full Strip



In baseball or in packaging—experience and talent count!

OVP—Oneida Versatile Packaging—means Oneida *has* the experience, talent and facilities to produce most *any* type of flexible package you need. Oneida's packaging engineers combine your requirements in design, construction and product protection to help solve the most difficult flexible packaging problems. What's more, these packages are generally smash hits at the nation's sales counters!

This versatility stems from the fact that Oneida has the vital engineering know-how, and fabricates from virtually every type of film and paper; producing printed rolls and sheets; flat, square, automatic, satchel-bottom, envelope and window style bags; featuring printing processes such as aniline, rotogravure, and oil.

Make *your* package a solid hit with Mrs. America! Take it to Oneida *now*. Four plants throughout the U.S. are at your service. Contact the plant or office nearest you, today!



Rolls and Sheets

Converters and Color Printers of Bags, Envelopes, Sheets and Rolls from: Glassine, Cellophane, Pliofilm, Parchment, Polyethylene, Sulphite, Foil, Acetate, Kraft, Waxed, Coated and Laminated Grades...in Flat, Square, Automatic, Window, Satchel-bottom, Duplex, Embossed and Heat-Lok Styles.



ONEIDA

paper products inc.

10 Clifton Boulevard, Clifton, New Jersey

3629 East First Street, Fort Worth, Texas • 8119 Beach Street, Los Angeles, Calif.



KEITH A. FITCH
Executive Director, formerly with U.S. Food and Drug Administration, Calif. Bureau of Food and Drug Inspections and Standard Brands Inc.



HERMAN L. FELTON
Vice-President, registered professional sanitary engineer, formerly a commissioned officer with U.S. Public Health, member of many honorary societies.



ROBERT M. RUSSELL
Sanitation Consultant with degree in chemical engineering with experience in all phases of environmental sanitation and food processing control.



ORMAN H. GLAZIER
Sanitation Consultant with experience in public health, dairy science and bacteriology. He holds a Masters degree from Yale in Public Health.

The **ORKIN INSTITUTE OF INDUSTRIAL SANITATION** *Offers You*

A Distinctive Service

Complete consultive and inspectional sanitation services designed to meet your demands for quality control are now available to all types of industry.

A Distinguished Staff

Realizing that a service is no more outstanding than the staff that offers it we are proud of these specialists and the vast experience they stand for.



JOHN J. DWYER
Sanitation Consultant with degree from Georgetown University, formerly with Continental Foods, Inc., U.S. Food and Drug Administration.



LESTER A. MEIS
Sanitation Consultant, M.P.H. from Univ. of Calif.; Kellogg Foundation, Continental Baking Co.; Sanitation Inspector U.S. Dept. of Navy.



MURRAY I. COOPER
Sanitation Consultant, Ph.D. from the University of Illinois; experienced in sanitation education and laboratory detection of extraneous matter in food.



MAX ISBELL
Sanitation Consultant, a Fellow of the Royal Entomological Society of London with many years practical experience in industrial pest control.

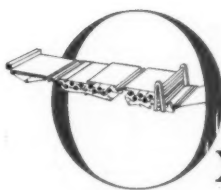
"Why it's better looking than ever!"



Each year millions of Americans view their homes with renewed pride because a timely painting has restored their original charm and fresh appearance. Wise homeowners know, too, that paint protection means larger maintenance economies and longer life.

The products of the huge paint industry reach every home, every shop and factory in the nation. They contribute vitally to our standard of living. In a large measure these manufacturers have attracted and sold their customers through colorful, informative brochures, sample folders, instruction booklets and other forms of promotional material.

Oxford Papers for industry can make your printed selling more appealing. They assure finer, more faithful color reproduction,—cleaner, sharper halftones. Specify an Oxford coated or uncoated grade for best results from your next promotion.



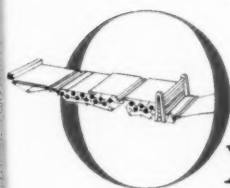
OXFORD PAPERS
Help Build Sales



OXFORD PAPER COMPANY
230 Park Avenue, New York 17, N. Y.

OXFORD MIAMI PAPER COMPANY
35 East Wacker Drive, Chicago 1, Ill.

Mills at Rumford, Maine, and West Carrollton, Ohio



OXFORD PAPERS

Help Build Sales

Wherever sales and merchandising require fine printing to convey a message, Oxford Papers are being specified. That's because experienced buyers of paper have learned the value of Oxford quality in helping to produce finer, more effective promotion material. Your nearest Oxford Merchant can be of real help in planning your printed selling. Why not call him in?

IT PAYS TO ASK FOR — AND USE THESE FINE OXFORD AND OXFORD MIAMI PAPERS

COATED PAPERS

Polar Superfine Enamel
Maineflex Enamel
Maineflex Enamel Cover
Maineflex Enamel, Coated One Side
Mainefold Enamel
Mainefold Enamel Cover
North Star Dull Enamel
Seal Enamel
Engravatone Coated
Coated Publication Text

UNCOATED PAPERS

Carfax English Finish
Carfax Super
Carfax Eggshell
Wescar Offset
Wescar Satin Plate Offset
Wescar Gloss Plate Offset
English Finish Litho
Super Litho
Duplex Label



OXFORD PAPER COMPANY, 230 Park Avenue, New York 17, N. Y.

MILLS AT RUMFORD, MAINE, AND WEST CARROLLTON, OHIO

Nation-wide Service Through Oxford Merchants

Albany, N. Y.	W. H. Smith Paper Corp.
Atlanta, Ga.	Wyant & Sons Paper Co.
Augusta, Maine	Carter, Rice & Co., Corp.
Baltimore, Md.	The Mudge Paper Co.
Bethlehem, Pa.	Wilcox-Walter-Furlong Paper Co.
Boise, Idaho	Blake, Moffitt & Towne
Boston, Mass.	Carter, Rice & Co. Corp.
Buffalo, N. Y.	Franklin-Cowan Paper Co.
Charlotte, N. C.	Caskie Paper Co., Inc.
Chattanooga, Tenn.	The Charlotte Paper Co.
Chicago, Ill.	Bond-Sanders Paper Co.
	Birmingham & Prosser Co.
	Bradner, Smith & Co.
	The Whitaker Paper Co.
Cincinnati, Ohio	The Johnston Paper Co.
	The Whitaker Paper Co.
Cleveland, Ohio	The Cleveland Paper Co.
Columbus, Ohio	Scioto Paper Co.
Dayton, Ohio	Cincinnati Cordage Co.
	The Whitaker Paper Co.
Des Moines, Iowa	Birmingham & Prosser Co.
Detroit, Mich.	Chope Stevens Paper Co.
Fresno, Calif.	Blake, Moffitt & Towne
Hartford, Conn.	Green & Low Paper Co., Inc.
Indianapolis, Ind.	MacCollum Paper Co.
Jacksonville, Fla.	Jacksonville Paper Co.
Kalamazoo, Mich.	Birmingham & Prosser Co.
Kansas City, Mo.	Birmingham & Prosser Co.
Knoxville, Tenn.	Louisville Paper Co.
Lincoln, Neb.	Western Newspaper Union
Little Rock, Ark.	Boach Paper Co.
Long Beach, Calif.	Blake, Moffitt & Towne
Los Angeles, Calif.	Blake, Moffitt & Towne
Louisville, Ky.	Louisville Paper Co.
Lynchburg, Va.	Caskie Paper Co., Inc.
Manchester, N. H.	C. H. Robinson Co.
Memphis, Tenn.	Louisville Paper Co.
Miami, Fla.	Everglades Paper Co.
Milwaukee, Wis.	Allman-Christian Paper Co.
	Sensenbrenner Paper Co.
Minneapolis, Minn.	Wilcox-Mosher-Leffholm Co.
Nashville, Tenn.	Bond-Sanders Paper Co.
Newark, N. J.	Bulkley, Dutton & Co., Inc.
New Haven, Conn.	Bulkley, Dutton & Co., Inc.
New York, N. Y.	Baldwin Paper Co., Inc.
	Bulkley, Dutton & Co., Inc.
	Green & Low Paper Co., Inc.
	Miller & Wright Paper Co.
	The Whitaker Paper Co.
Oakland, Calif.	Blake, Moffitt & Towne
Omaha, Neb.	Western Paper Co.
Philadelphia, Pa.	Atlantic Paper Co.
	Wilcox-Walter-Furlong Paper Co.
Phoenix, Ariz.	Blake, Moffitt & Towne
Pittsburgh, Pa.	General Paper Co.
	Brubaker Paper Co.
Portland, Maine	C. H. Robinson Co.
Portland, Ore.	Blake, Moffitt & Towne
Providence, R. I.	Carter, Rice & Co., Corp.
Richmond, Va.	Cauthorne Paper Co.
Rochester, N. Y.	Genesee Valley Paper Co.
Sacramento, Calif.	Blake, Moffitt & Towne
St. Louis, Mo.	Shaugnessy-Kniep-Hawe Paper Co.
	Tobey Fine Papers, Inc.
San Bernardino, Cal.	Blake, Moffitt & Towne
Salt Lake City, Utah	Western Newspaper Union
San Diego, Calif.	Blake, Moffitt & Towne
San Francisco, Calif.	Blake, Moffitt & Towne
San Jose, Calif.	Blake, Moffitt & Towne
Seattle, Wash.	Blake, Moffitt & Towne
Sioux City, Iowa	Western Newspaper Union
Spokane, Wash.	Blake, Moffitt & Towne
Springfield, Mass.	Bulkley, Dutton & Co., Inc.
	(Div. of Carter, Rice & Co. Corp.)
	Mill Brand Papers, Inc.
Stockton, Calif.	Blake, Moffitt & Towne
Tacoma, Wash.	Blake, Moffitt & Towne
Tampa, Fla.	Tampa Paper Co.
Toledo, Ohio	Paper Merchants, Inc.
Tucson, Ariz.	Blake, Moffitt & Towne
Washington, D. C.	The Mudge Paper Co.
Worcester, Mass.	C. A. Eady Paper Co.
	(Div. of Carter, Rice & Co. Corp.)

OXFORD MIAMI PAPER COMPANY, 35 East Wacker Drive, Chicago 1, Ill.



Swift's Adhesives help you ...

and the baseball fan, too!

Whether he knows it or not, this ardent fan is served by adhesives every day in countless ways. Not only at the ball park, but wherever he may be. Adhesives are used to seal and form the packages that contain the foods and merchandise he buys. They keep the labels on bottles and jars . . . are a vital part of numerous other products he uses every day. Chances are that many of these adhesives come from Swift's varied line.

Our years of experience—combined with our wide range of raw materials and extensive plant facilities—can help you find the adhesive that fits your requirements . . . lowers your operating cost.

Here's a Swift's Adhesive for packaging operations #1262—Liquid adhesive for top and bottom sealing, tite-wrap work. A fast setting, clean machining, non-warp type adhesive.

Call
SWIFT
first for
ADHESIVES

Swift & Company
Adhesive Products Department (BC4)
Chicago 9, Illinois

(This offer expires
May 31, 1952)

Please send your 100 lb. introductory trial shipment of Swift's #1262 Adhesive at the quantity price, to be tested for use in our operations. We understand, if not fully satisfactory, it may be returned for credit at your expense.

Name _____ Title _____

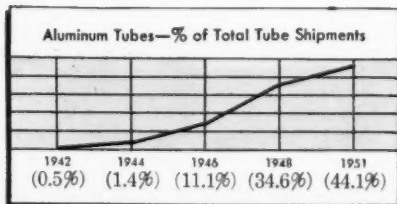
Firm Name _____

Address _____

City _____ State _____



*Safeguarding the quality
of famous brands*



"SEE IT NOW," with Edward R. Murrow,
brings the world to your armchair...
CBS-TV every Sunday—3:30 P. M. EST

If you are making a product that belongs in a tube, the small chart shown at the left should start you thinking. And if you're not already using *aluminum* tubes, you'll probably say to yourself—"maybe I ought to look into them."

We'd like to help you do just that...to find out through test if Alcoa Aluminum Tubes are *right* for your product. If they can save you on packaging costs, speed your production, give you better, surer protection.

These answers are yours for the asking... through Alcoa's Packaging Laboratory. We invite you to use its facilities, without obligation. Just call your local Alcoa Sales Office, listed under "Aluminum" in your classified phone directory, or write:

ALUMINUM COMPANY OF AMERICA
1752D Gulf Building • Pittsburgh 19, Pa.

ALCOA
Aluminum Tubes



MODERN PACKAGING

Heat Sealable
**PLASTIC
INTER-LINER**

(Polyethylene, Plinfilin, etc.)

**KEEPS OUT
AIR-MOISTURE
ODORS**

Locks-in Flavored Aroma

Odorless, tasteless innerbag is impervious to transfer of odors in or out of the package and, when heat sealed, provides a strong welded, hermetically tight enclosure.

**3 Times Longer
Protection**

WITH

Kard-O-Pak

**THE MODERN
FLEXIBLE CONTAINER**



**SELF
OPENING
FLAT
BOTTOM**

Stands firm and
upright for use on
**AUTOMATIC
FILLING
EQUIPMENT**

**Also Available
A COMPLETE LINE
OF FLEXIBLE CONTAINERS**

★ American is one of the quality producers in the paper bag industry, and offers a complete service from creative design to precision multi-color printing. Your inquiry is invited.

Kard-O-Pak

THE FLEXIBLE CONTAINER THAT GIVES
PROTECTION 3 TIMES LONGER!



SOAP POWDER



COFFEE



MILK POWDER



PLANT FOOD

AMERICAN BAG AND PAPER CORP., Water and South Sts. • Phila. 47, Pa.



The

CARTON BUYER

May Not Know . . .

. . . that "make-ready" is one of the most important steps in carton manufacturing. So that your printing plates make "good impressions" we attach a great deal of importance to

very carefully leveling and laying the plates.

Every form is put together by printing craftsmen who are never in too big of a hurry to slight the importance of perfect "make-ready"

ACE CARTON CORPORATION

5800 West 51st Street • Chicago 38, Illinois

Phones: POrtsmouth 7-1111



Laying plates on Patent Base.

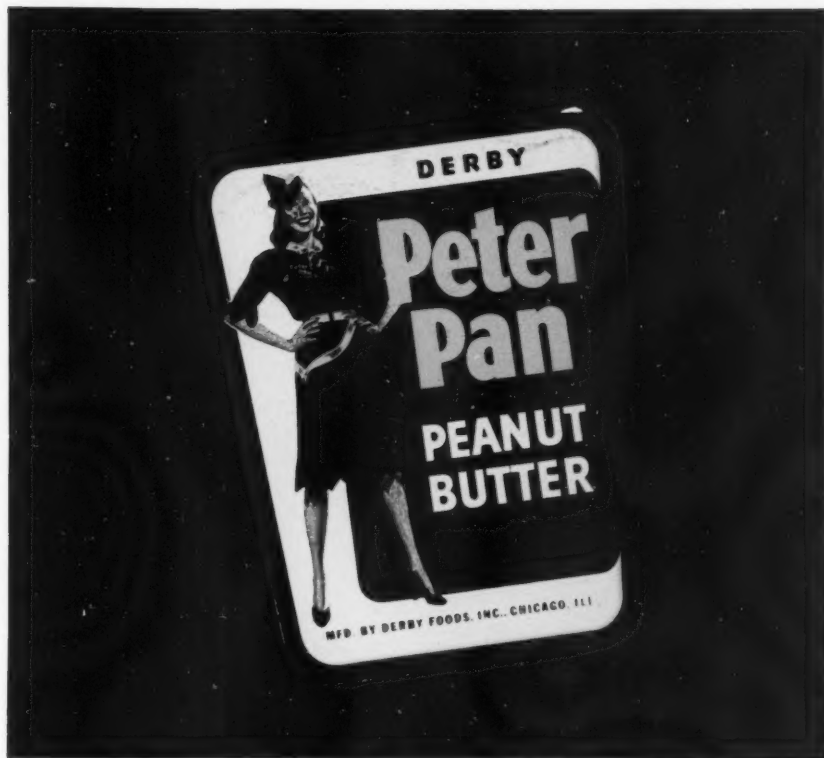
The feeding end of a two-color press.

The delivery end of a two-color press.

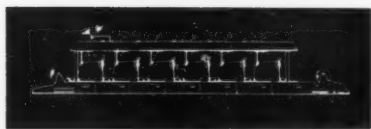
The male cutting and creasing die.



Another shining example of our Craftsmanship *on foil*



DESIGNERS AND MANUFACTURERS
OF DISTINCTIVE PRINTED PACKAGING ON
CELLOPHANE • FOIL • GLASSINE • PAPER



Rotogravure Packaging

INCORPORATED

820 • 26 NORTH CICERO AVENUE • CHICAGO 51, ILL.

SALES OFFICES:

CHARLES V. FLYNN

141 EAST 44th STREET
NEW YORK 17, N.Y.

R. G. F. BYINGTON

1250 N. WESTERN AVENUE
LOS ANGELES, CALIFORNIA

APRIL 1952

**NATIONAL
CAN**
means
**GOOD
PACKAGING**



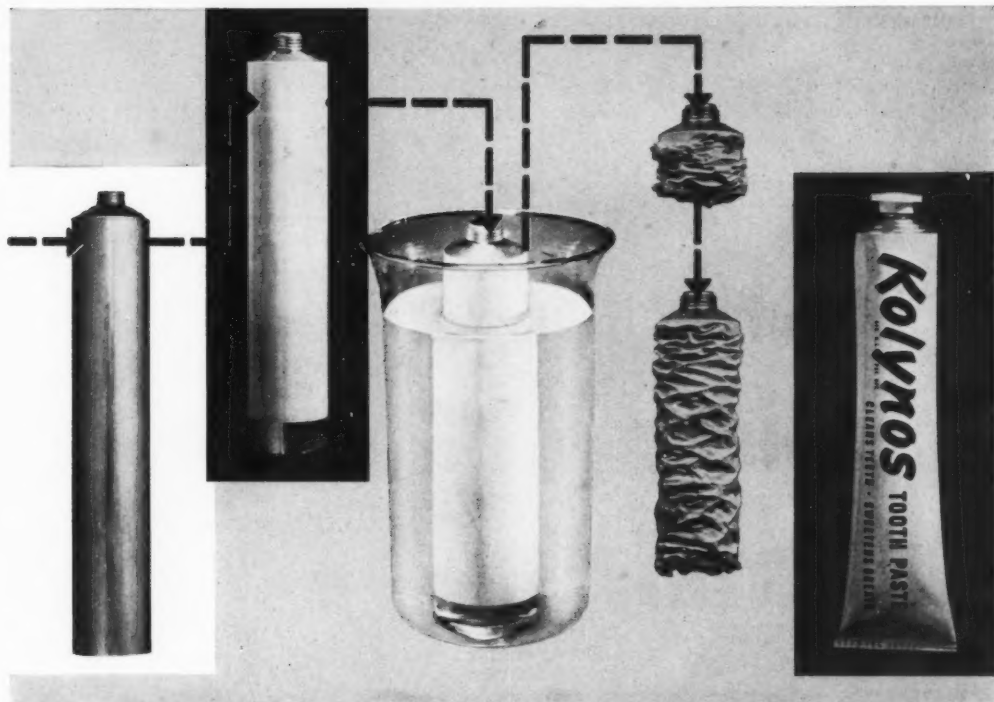
Your sales depend largely upon
the quality of your containers. National Can's rigid
adherence to standard can specifications plus our
personal supervision of your packing operation
assures you of quality packaging . . . and quantity sales.

Discuss your packaging problems with
National Can. Call or write today.

**NATIONAL CAN
CORPORATION**

110 EAST 43rd STREET, NEW YORK 17, N. Y.





How coatings based on VINYLITE Brand Resins are tested for use on collapsible aluminum tooth paste tubes. Tube blank (left) is first roller-coated and dried. Sample is next soaked in tooth paste and soapy water solutions, then crushed, drawn out again, and examined for cracks,

chips, peeling, and lifting. Right, Kolynos tooth paste tube finished by Victor Industries Corporation, 193 Newell St., Brooklyn, N. Y., with coatings based on VINYLITE Resins, made and tested by Kirker Chemical Company, One East 11th Street, Paterson 4, N. J.

Coatings for Flexible Products

ECONOMICAL FINISHES BASED ON VINYLITE BRAND RESINS CAN BE BENT, CRUSHED, TWISTED

If there is any package that gets a worse beating than your favorite tooth paste tube, please let us know. It will be another place to use tough, resilient coatings based on VINYLITE Brand Resins.

So adherent are these coatings on collapsible aluminum tubes that, when crushed and then drawn out, again as shown, they neither crack, chip, peel, nor lift. This in spite of previous twenty-four-hour soakings—one in a solution containing 10 per cent of the tooth paste itself and another containing 1 per cent soap.

Of course the user doesn't straighten out his tube once he crushes it. But, this proof of the

ability of the coating to survive extreme rough treatment means that the consumer won't be disgusted with a tube that flakes off on his hands. It means that the manufacturer's name and distinctive colors will always be recognizable.

Highly resistant to alkalis and most strong acids, coatings based on VINYLITE Resins are flexible, tough, economical and excellently suited to fast finishing schedules demanding a short bake.

For defense, business and industry, these materials are made in virtually every conceivable color. They readily accept multi-color printing. Easily applied by roller, spray, or brush,

they are widely used on metal foil, paper, cloth and other packaging materials to give utmost protection and beauty.

Why not investigate how they can be used to improve your packages. Ask for more information and a list of representative suppliers of coatings based on VINYLITE Brand Resins. Write Dept. MT-55.

Vinylite
BRAND
RESINS



BAKELITE COMPANY
A Division of
Union Carbide and Carbon Corporation
30 East 42nd Street, New York 17, N. Y.

in packaging.

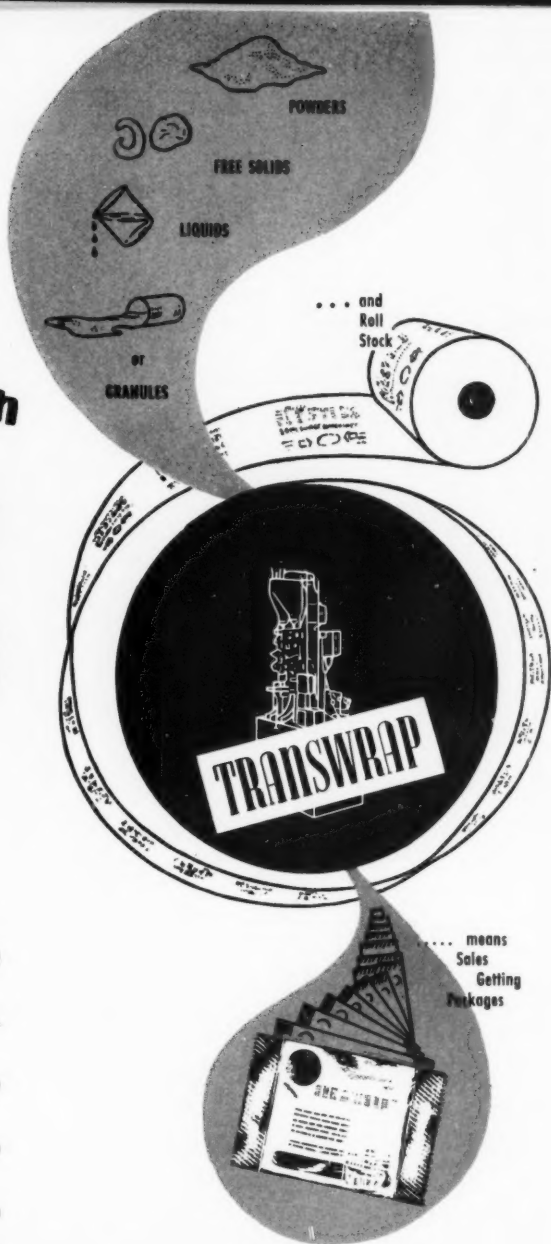
It CAN'T cost less than **Completely Automatic**

ONE
STEP
PACKAGING

For Liquid Products

- A SINGLE OPERATION . . . forming, filling and sealing
- FASTER PRODUCTION . . . speeds to 120/min.
- 100% FILL . . . an air free package
- ACCURATE MEASURE . . . with positive displacement rotary pump
- LOWER PRODUCTION COSTS . . . in materials, labor and operation

Five good reasons for investigating TRANSWRAP, Today. It's the most sensational new package in the field. Ask for our complete folder on LIQUID PACKAGING.



TRANSWRAP ENGINEERS AND AGENTS ARE READY TO ANALYZE YOUR PACKING PROBLEM COMPLETELY. Contact them immediately.

TRANSPARENT WRAP MACHINE CORPORATION
ROUTE 17 HASBROUCK HEIGHTS NEW JERSEY

"Originators of Completely Automatic Packaging"

Agents in Principal Centers of U.S., Canada, Mexico and South America

SALES GEMS



Jewels Courtesy of
Harry Winston, Inc.

PLAXPAK BOTTLES...

Counter brilliance...Take-home appeal

Color to attract the eye...a softly lustrous finish to please it...these are visual assets accorded products packaged in Plaxpak® polyethylene bottles. Couple these advantages with unbreakability, light weight and touch appeal — and you've got a package that starts selling the moment it appears on the counter and that keeps selling every time it's used.

PLAX CORPORATION HARTFORD 1, CONNECTICUT

Plax® blow-molded products made under U. S. Pat. 2,172,239, 2,175,053, 2,175,054, 2,230,100, 2,230,100, 2,260,750, 2,263,751, 2,340,176, 2,340,177, 2,340,178.



through 62 eventful years...

JOHNSTON

ALUMINUM TIN LEAD
COMPOSITION TIN AND LEAD



...has delivered the goods

THE GAY

1880's

THE NEW CENTURY

1900

FORTUNE AND FANCY

1910

PEACE AND PROSPERITY

1920

HUNGER AND
DEPRESSION

1930

WORLD
CONFLAGRATION

1940

SCIENCE AND
SECURITY?

1950-51

what are **YOUR** needs?

JOHNSTON has helped

America live through 62 years of Peace
and War. Our service, now,
as in the past, is ever widening and ever
alert to the changing requirements of
modern merchandising. We manufacture
aluminum tin, lead and composi-
tion tin and lead foil for your vari-
able and specific purposes.

J

JOHNSTON FOIL MANUFACTURING CO.

6016 6298 S. BROADWAY

ST. LOUIS 11, MO.

SALES OFFICES

408 SOUTH DEARBORN
34 FREEMAN PLACE
833 SOUTH LA BREA AVE.

CHICAGO, ILLINOIS
JERSEY CITY, NEW JERSEY
LOS ANGELES, CALIFORNIA



people want

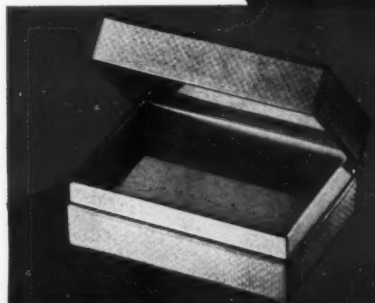
*Fine
Paper Boxes*



**Rowell
makes
them**



COSMETIC BOXES



PRESCRIPTION BOXES



E. N. Rowell Co., Inc.
Manufacturers of Fine Paper Boxes
BATAVIA, N. Y.

APRIL 1952



America's
most
economical hands...

A result of Kum-Kleen
SEMI-MATIC labeling

Production-line speed..
free of expensive equipment cost!

Kum-Kleen

NEW YORK CITY: 41 Park Row
DETROIT: 3049 East Grand Boulevard
CLEVELAND: 2123 East 9th Street
PHILADELPHIA: Commercial Trust Building
CHICAGO: 608 South Dearborn Street
CINCINNATI: 626 Broadway Street
MONROVIA: California



Kum-Kleen *Semi-Matic* Labeling provides you with America's most economical hands... plant after plant throughout America has shown remarkable increases in the speed and efficiency of their hand labeling operations. Many report as much as five times the labeling production per employee. *Pressure-sensitive* Kum-Kleen Labels, on "conveyor-belt" rolls, feed through the Avery electric dispenser as fast as they can be applied by the operator. Waste motion of handling and sorting loose labels is completely eliminated. Compact dispenser fits into any production line... and can be operated by unskilled help.

Kum-Kleen Pressure-Sensitive Labels can be applied to any smooth surface, without moistening. They stick-and-stay-stuck, will not pop, peel, or curl, even in extremes of heat and humidity.

If you're having problems with any hard-to-label surfaces... if you want to lower hand labeling costs... if you want America's fastest hands... hand labeling at production line speed... send for samples and information of Kum-Kleen Labels and Avery *Semi-Matic* Labeling today.

EVERY ADHESIVE
LABEL CORPORATION

*Representatives in all
principal cities*



A New Name is Born in Plastic Packaging...

Lermer
P LASTICS, INC.

Guided by Creative Pioneers in the Plastics Industry

LERMER PLASTICS, INC., was formed this year by Herman B. Lermer and Irving S. Lermer, known for the past thirty-two years as leaders in the manufacturing of plastic vials and containers.

Their new plant will utilize every modern production facility, with a complete engineering staff for design and creative assistance to produce the most effective, attention-compelling, plastic containers for the products you manufacture.

These transparent or colorful opaque containers can be permanently printed and decorated to give you every advantage at point of sale, and in re-use as a constant reminder for repeat business.

Your inquiries are welcome. Join the many front-line firms who have already made this new company a prime source of supply.

Lermer Plastics, Inc.

502 South Avenue • Garwood, New Jersey

THERE IS NO SUBSTITUTE FOR EXPERIENCE, SERVICE, PLUS CREATIVE ENGINEERING!

NEW! AMAZING STICK-ON-BOWS



Burlington's exclusive ready made Stick-on-Bows stick to any surface...

Burlington's revolutionary "Stick-on-Bows" come ready made, with "presto" adhesive tabs to make it easy as pie to apply—and quick as a flash—to any package.

Retailer or manufacturer, *you'll save money* — because ready made "stick-on-bows" mean no wasted ribbon! You save *money and time* for you no longer need train your help to tie gift bows! And you'll make more sales, because beautiful "stick-on-bows" give your package that *extra special* sales appeal . . . for only pennies more!

PERFECT FOR ANY PROMOTIONAL EVENT

Special selling messages, plus any flower center, can be printed on the ribbon . . . to tie-in with a special event or gift-giving occasion. And "stick-on-bows" are ideal for everyday selling, too.

A MAGNIFICENT VARIETY

Miniature rose or pansy center, pine cone and evergreen spray center—your choice of an exciting variety of combinations, from rosettes to Giant 27 loop Pom Poms.

TAKE YOUR PACKAGING PROBLEMS TO BURLINGTON

Burlington's Development Department is at your service to help solve packaging problems, to create special ribbon wraps to wrap up sales for you!



RIBBON DIVISION

Burlington Mills
"Woven into the Life of America"



26 West 40th Street, New York 18, N. Y.

Prize Packages

IN ANY CEREAL ROUND-UP

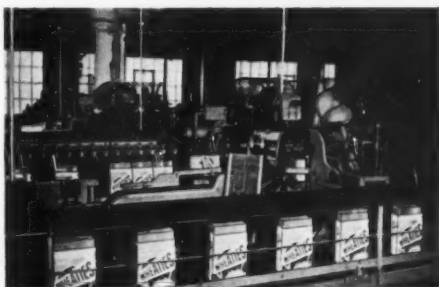


**Formed, filled and sealed
by PNEUMATIC equipment**

No one could deny that General Mills are plenty smart about promoting the sale of their breakfast food trio — Wheaties, Kix and Cheerios. Is there a young'un of your acquaintance who hasn't heard of "Breakfast of Champions"? . . . and who doesn't know the Lone Ranger?

Likewise, no one can deny that General Mills are plenty smart about packaging their cereals, too. They use Pneumatic equipment . . . including the efficient Double Package Maker combination which forms a "package within a package" for maximum product protection.

As a user of Pneumatic machines General Mills is one of the many leading producers of nationally distributed brands that depend on this proven method of volume packaging at a "lower cost per container." This is good evidence for you to act on, when you're modernizing your packaging operations.



*Pneumatic Double Package Maker Installation at General Mills
Modern Cereal Plant, Buffalo, New York*



PNEUMATIC SCALE CORP., LTD., 82 Newport Avenue, Quincy 71, Mass.
Also: New York; Chicago; San Francisco; Los Angeles; Seattle; Leeds, England.

Packaging and Bottling Equipment



CUSTOM-MADE PACKAGING ADDS QUALITY APPEAL TO READY-MADE PRODUCTS

... The quick translation of eye appeal into buy appeal makes superior packaging highly profitable. That is why preference is given Ridgelo custom-made, clay-coated boxboard by so many leading manufacturers of confections and food specialties.



Custom Made

Different, better...in so many, many ways! More uniform, brighter and whiter, easier and more economical to print. And — available in a wide variety of finishes and coatings.

**MADE AT RIDGEFIELD, N. J.
BY LOWE PAPER COMPANY**



Representatives

H. B. Royce, Detroit
Philip Rudolph & Sons, Inc., Philadelphia
A. E. Kellogg, St. Louis
Norman A. Buist, Los Angeles

SYLVANIA CELLOPHANE



This tough, durable, completely transparent wrap is engineered to meet a wide range of packaging needs in the confectionery field. It permits easy, low cost, high speed application, heat seals quickly and strongly, can be imprinted in bright, lustrous colors, and because it gives you more for your packaging dollar, is economical to use.

Our Market Development Department will be glad to work with you in determining how your present supply can be utilized more effectively—either through improved package design or the use of a different type or gauge. Write Department MP-4.

SYLVANIA DIVISION AMERICAN VISCOSE CORPORATION



General Sales Office:
1617 Pennsylvania Blvd.,
Philadelphia 3, Pa.



Here is that old stand-by, sauerkraut, all fancied up with pickles, tomatoes and peppers. And, it's all in the interest of good eating, for this combination makes a mighty tasty cold salad that goes over big with light meals, picnics, friendly gatherings and so on. The folks who pack it* call it "Hungarian De Luxe" . . . and folks who eat it call it "plenty good."

Sauerkraut steps out in style!

If you're keeping your eye on the closure buying habits of packers these days, you're aware of the fact that more and more are buying from Crown. In packing operations everywhere, Crown Closures are proving that they meet packers needs from all angles. Why not take a tip from these satisfied users? Come to Crown for your closure needs. We'll help you select the closure and liner that is best . . . scientifically best . . . for your particular requirements. Crown Cork & Seal Company, Baltimore 3, Maryland. *World's Largest Makers of Metal Closures.*

*Hungarian De Luxe is packed by Stern Pickle Works, Inc., Brooklyn, N. Y. Crown Screw Caps with specially selected liners are used to seal this product.



CROWN CLOSURES

Approved by Millions of Housewives

Who Gets the Blame when Colors Don't Look the Same



When colors match in the pressroom but jump apart in the office, who gets blamed?

In most cases the real culprit is light. For colors matched visually in incandescent light may not match in fluorescent light and vice versa. The secret lies in a standard light approximating daylight in both places. But colors matched by the Recording Spectrophotometer will match under all light, regardless of type.



IPI Anilox and Vapaset are trademarks of Interchemical Corporation.

As a Sketch It's Nice but Think It Over Twice

A package design can be a knockout on the drawing board, have plenty of eye-appeal



—but how will it print? Did the artist know the printing process, kind of stock, type of ink to be used? Was overprint varnish specified? These and many other factors affect printed results. So be sure that all concerned are consulted early. And for best results, see your inkmaker while package is still in dummy stage.

INTERCHEMICAL CORPORATION • PRINTING INK DIVISION • 67 WEST 44th ST., NEW YORK 18 • ADDRESS DEPT. A

NEW SUPPLY OF "ANILINE PRINTING" NOW AVAILABLE

Our report on "Aniline Printing" proved such a hit with package printers that 5,000 copies didn't go around. A new supply is now ready—will take care of the many requests we receive from printers everywhere. They say it's the most complete survey of aniline process they've seen.

Aniline printers find this report a valuable source of semi-technical data. If you're going into aniline work, there's no better primer.

Your IPI salesman has a copy of "Aniline Printing" for you, or write to IPI headquarters, 67 West 44th Street, New York 36, New York.



SEALRIGHT CO. PICKS IPI ANILOX INKS FOR REVOLUTIONARY PLASTIC COATED PACKAGES



IPI Solves Tough Problem—Bonds Ink Firmly to Slick, Plastic Coated Surface

"Revolutionary" is the word for plastic coated *Sealright* milk cartons and *Sealright* food and ice cream containers by Sealright Co., Inc. of Fulton, N. Y. They "stand up" under rough use and "stand out" with bright, sparkling designs printed with IPI Anilox inks. The Bowman Dairy Co. (Chicago) milk carton and nationally known "Lady Borden" ice cream packages are typical examples.

Inks for *Sealright* milk cartons were tough to develop. The paperboard is plastic coated and then printed at 300 fpm. Inks must bond firmly to slick plastic, dry fast, be odor and taste free, resist mild acids and alkalis—also withstand sterilizing, forming heat and pressure. Special IPI Anilox inks do all this. Delivered to dairies as flat sheets, *Sealright* milk cartons are said to save 90% in shipping, storage. Formed, sterilized and sealed locally, they are ideal bump-proof, leak proof and taste proof cartons.

The *Sealright* food and ice cream containers have the same leak proof, taste proof features of *Sealright* cartons—also take ovenbaking, deep freezing. The same remarkable IPI Anilox inks fit their needs perfectly. Free from paper taste, *Sealright* containers are also popular for hot coffee, cocoa, soup and baked goods. Ask your IPI salesman about Anilox inks to solve your package printing problems.

VAPASET GIVES PACKAGE PRINTERS BETTER, FASTER PRINTING ON WIDE RANGE OF STOCK

Yes, IPI Vapaset inks can help you get better, faster printing on a wide range of stock. Fast drying, odor free, with excellent heat-seal qualities, they are ideal for breadwrap printers—can be put through waxing machines two hours after printing. And Vapaset inks are tops for corrugated and heavy fiber stocks, especially when stock must be fabricated right after printing. They dry instantly with steam, set fast with natu-

ral moisture in board. Paper cup makers like the steam setting feature of Vapaset inks since it takes no moisture from the stock—keeps it soft for easy forming.

Versatile IPI Vapaset inks can withstand the higher temperatures of new waxes containing plastics. No ink "pull-off" after waxing—and colors are stronger and better than ever. Carton printers heartily endorse their smoother finish and improved rub resistance.

Ferdinand

Pied Piper

By Milk



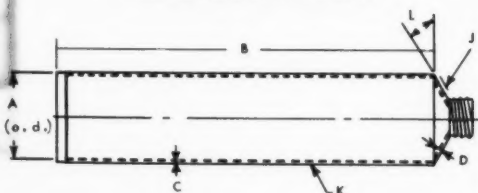
Advertisements

TUBE DATA FOR PACKAGE DESIGNERS

Standard Sizes and Capacities of WIRZ Tubes

Tube Size (Diameter)	Max. Length	Approximate Capacity (fluid ounces)	Allowable Range of Orifices and Necks					
			8	10	12	16	20	28
3/8"	2"	1/8—1/4 oz.	X	X	X			
1/2"	4"	3/4—3/8 oz.	X	X	X			
3/8"	4"	1/4—1/2 oz.	X	X	X	X		
3/4"	4 1/2"	3/8—7/8 oz.		X	X	X		
7/8"	5 1/4"	1—1 3/8 oz.		X	X	X		
1"	6"	1 3/8—2 1/4 oz.			X	X	X	
1 1/8"	6 1/2"	2—2 3/4 oz.			X	X	X	X
1 1/4"	7"	2 1/2—3 1/4 oz.			X	X	X	X
1 3/8"	7 1/8"	3—4 oz.			X	X	X	X
1 1/2"	7 1/4"	3 1/2—5 1/2 oz.			X	X	X	X
1 3/4"	8"	6—8 oz.					X	X
2"	10"	8—15 1/2 oz.					X	X

Standard Nomenclature



- A Outside Diameter
- B Body Length
- C Wall Thickness
- D Shoulder Thickness
- J Shoulder Embossing
- K Base Coat and Printing
- L Shoulder Angle

Standard Openings —

Size of Neck	No. 8	No. 10	No. 12	No. 16	No. 20	No. 28
Size of Opening	1/8"	3/16"	1/4"	5/16"	3/8"	7/8"



Tips & Applicators

Eye Tip	Maximum Opening	3/4"
Nasal Tip	"	3/8"
Acorn Tip	"	1/4"
Caulking Tip	"	3/4"
Grease Tip	"	.210"
Screw Eye Tip for reclosing cement tubes		
Thomas Tip for one use tube		

For full tube information write for our 8-page folder, "Wirz Collapsible Metal Tubes"—no obligation, of course.



New York 17, N. Y.
30 E. 42nd St.

Chicago 4, Ill.
80 E. Jackson Blvd.

Memphis 2, Tenn.
Wurzberg Bros.

Los Angeles 48, Calif.
435 S. La Cienega Blvd.

Havana, Cuba
Roberto Ortiz & Son

Export Division—772 Drexel Bldg., Philadelphia 6, Pa.

Collapsible Metal Tubes • Lacquer Linings • Wax Linings • Westite Closures • Soft Metal Tubing • Household Can Spouts • Applicator Pipes • Compression-Injection Molding

4th & Cole Streets, Chester, Pa.

NEW WAYS

FROZEN CHICKEN PARTS

Frozen Food Shipping Bags
Expedite Split Case Orders

Processor's assembly-line packaging of frozen chicken parts in 24-consumer-unit corrugated shipping containers necessitates wholesalers' repacking of dealer orders on basis of individual store requirements. To minimize wholesalers' labor costs, packer now assembles consumer units in lots of six in 50-lb. wet-strength, water-repellent bags, four bags per corrugated container.

PARKING METERS

Printed Bag Turns Meters
Into "No Parking" Signs

Credit a smart Chief of Police for this one. "Main Street" lined with parking meters, and a big parade scheduled for the following week. Problem: keep the thoroughfare clear, meters inoperative. Solution: cover the meters with wet-strength grocery bags imprinted "No Parking"! May be that you too have a packaging situation where a Union Wet Strength Dolphin bag may provide an ingenious low-cost answer.

CORN

Ice, Wet-Strength Bags,
Deliver Field-Fresh Ears

Four to five dozen ears of highly perishable sweet corn and twenty lbs. of ice are accommodated in these new containers. Packed in the field, the corn is container-refrigerated en route to warehouse or wholesale market. This simple packaging operation radically lengthens retail counter life, delivers a more flavorful product to the consumer.

ROSE BUSH BAGS

Duplex, Sift-proof Bag Protects
Nursery Stock, Adds Sales Appeal

Canny nursery men now package roses and other nursery stock in Union Rose Bush Bags. Outer lining of duplex container is colorfully printed; inner sheet, with special sift-proof bottom construction, protects roots, retains moisture in damp moss. Bag is suitable for machine packaging at rate of one hundred rose bushes per hour, per two man crew.



UNION BAG & PAPER CORPORATION

WOOLWORTH BUILDING • NEW YORK 7, NEW YORK



THE INGREDIENT THAT CAN'T BE CALIBRATED!

We strive to make every delivery of Cochran aluminum foil an example of technical perfection . . . in the material itself and in the meticulous care with which your specifications are met.

Every delivery brings you something extra, too—
an ingredient that can't be measured; a unique personalized service that goes above and beyond all ordinary standards.

People who do business with us will tell you how much that means.

Cochran **FOIL COMPANY**

INCORPORATED

LOUISVILLE 10, KENTUCKY

SPECIALISTS IN ALUMINUM FOIL

SALES	714 Wrigley Building,	632 Fisher Building,	238 West Wisconsin Avenue,	500 Fifth Avenue,	Hippodrome Building,
OFFICES:	Chicago 11, Illinois	Detroit 2, Michigan	Milwaukee 3, Wisconsin	New York 18, N. Y.	Cleveland 15, Ohio

Now 24.5% Less **DESICCITE**

Required in Your Method II Packages Under the New Packaging Desiccant Specification **MIL-D-3464**

This specification now recognizes the long standing superiority of Filtrol's desiccant—Desiccite* 25 in producing safe, low relative humidity levels.

The same high quality, highly efficient Desiccite 25 as manufactured for the past 11 years by the World's Largest Manufacturer of Desiccants, Catalysts and Adsorbents, now gives you these advantages:

LESS WEIGHT
LESS VOLUME
LESS COST

Filtrol*

CORPORATION

GENERAL OFFICES:
727 West 7th Street, Los Angeles 17, California

Distributors located in principal cities
throughout U.S.A. and Canada.

IMPORTANT NOTICE

The new specification MIL-D-3464 eliminates all grade designations such as A, B and C, and chemical names such as silica gel.

CAUTION

Do not mistakenly specify silica gel or any grade of desiccant in your orders and requests for quotations.

For a complete summary of all important points concerning the new specification MIL-D-3464, mail this coupon today.

Please send me new literature on specification MIL-D-3464
GENERAL OFFICES: 727 West 7th Street, Los Angeles 17, California

NAME _____

TITLE _____

STREET _____

CITY _____

ZONE _____

STATE _____

POTDEVIN Packaging Equipment

Reduces Manufacturing Costs!

Speeds-up Production!

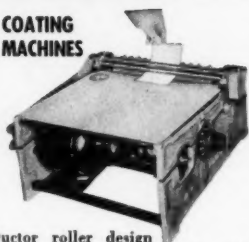
Improves Quality!



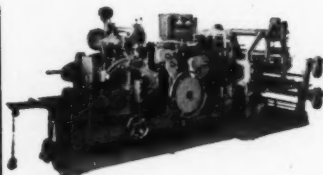
**SELF-OPENING-SQUARE
BAG MACHINES**

High speed production of 11"x6"x2" shopping bag or multi-wall baler bags.

**COATING
MACHINES**



Ductor roller design in 6, 9, 12 and 15 inch widths.



**CELLOPHANE
BAG MACHINERY**

Models for single, duplex, flat-and-square, satchel-bottom bags.



**S.O.S. GROCERY
BAG MACHINES**

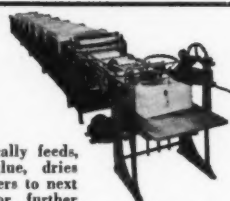
Converts rolls of Kraft or sulphite paper into finished, trade-marked bags. Adjustable for 1/4 lb. to 35 lb. inclusive.

**OIL
INK
PRINTING
PRESSES**

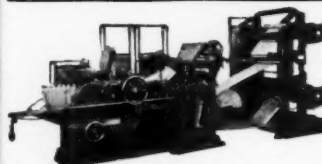


Wide range of types and sizes including one to six colors for drinking cup paper, coffee, sugar, flour bags, cellophane, glassine, parchment, etc.

**STRIP
GLUERS**



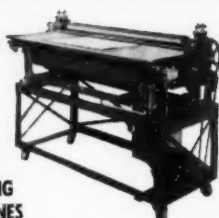
Automatically feeds, applies glue, dries and delivers to next station for further processing. Adjustable up to 21" wide.



**FLAT & SQUARE (Tucked)
PAPER BAG MACHINES**

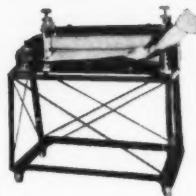
High speed production of grocery, notion, millinery, shipping container and large specialty bags. Adjustable for large range of sizes.

**SHEET
COATING
MACHINES**

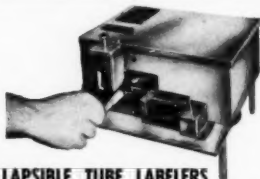


For any type hot or cold material. Sizes up to 46 inch widths and larger for sheet or roll coating.

**ROTARY
COMBINING
PRESSES**



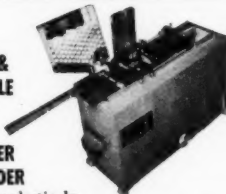
High speed combining of glued materials up to 1/2" thick and 30" wide. For hand feeding flat sheets or in production line for web materials.



COLLAPSIBLE TUBE LABELERS

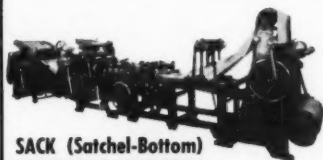
Applies 32 slip labels per min. to collapsible tubes. Automatically forms label and ejects label on tube. Machines for 1/8, 1/4, 1/2, 1 ounce tubes.

**VIAL &
AMPULE**



**LABELER
& CODER**

Thermoplastic labelers in 1, 2, 3, 5 and 10 cc sizes. Hopper automatically feeds vial or ampule for labeling and coding.



**SACK (Satchel-Bottom)
PAPER BAG MACHINES**

Wide range of sizes for making single or multi-wall poultry, charcoal, potato, flour sacks and shopping bags.

POTDEVIN has been designing and building superior quality equipment for the packager since 1893. Consult our engineers on any problem. No obligation.

Write for detailed information on any equipment illustrated in this ad.



POTDEVIN MACHINE CO. 244 North St., Teterboro, N. J.

Designers and manufacturers of equipment for Bag Making, Printing, Coating, Laminating, Gluing and Labeling.



It has changed a lot inside, too!

The modern drugstore is a far cry from this old-timer—inside and out.

Good-by to ancient prescription jars and paper packages for powders. Today, as you know, thousands of drugs are packaged in modern, sanitary containers such

as those shown below.

Many such containers have been pioneered by American Can Company since 1901.

Canco will continue to pioneer improvements for its customers in many businesses . . . in many fields.



*CONTAINERS—
to help
people live better*





From the Gardner Gallery of famous American Packages

Natural Attraction?

... (IT COULD VERY WELL BE)

If "like attracts like" then it's not surprising that so many of the fine products on the nation's shelves wear Gardner cartons.

For just as these products have earned the confidence of consumers . . . so have Gardner cartons earned the confidence of manufacturers. And we believe this confidence comes from something more than a knowledge of Gardner's extensive physical facilities.

Here at Gardner we believe in never being quite satisfied with a good job. We feel an obligation to ourselves—and to our customers—to do even better, tomorrow, what we have gained recognition for doing well, today.

We think that's an even more important reason why you'll find so many of America's most famous products packaged in Gardner cartons.

THE GARDNER BOARD AND CARTON CO.

Manufacturers of Folding Cartons and Boxboards

GENERAL OFFICES: Middletown, Ohio—PLANTS: Middletown, Ohio; Lockland (Cincinnati), Ohio
Sales office in Chicago, Cleveland, New York, Philadelphia, Pittsburgh, St. Louis



**WET,
BUT
STILL
TOUGH**



...with tailor-made **Riegel** papers

A few things **RIEGEL**
can do for you . . .

- ▶ Keep products dry
- ▶ Keep products moist
- ▶ Retard rancidity
- ▶ Retard mold
- ▶ Seal with heat or glue
- ▶ Provide wet strength
- ▶ Stop grease penetration
- ▶ Retain aromas, flavors
- ▶ Resist extreme cold
- ▶ Reduce breakage
- ▶ Prevent sifting
- ▶ Protect from light
- ▶ Resist alkalis
- ▶ Resist corrosion
- ▶ Boost machine efficiency

PRODUCTS that are so "wet" they weaken ordinary papers
are a common problem in protective packaging.

Fish, for example, or butter, or celery. It is a problem

Riegel has solved for many different products by
developing special high-wet-strength papers . . . some
actually stronger wet than dry. No two problems

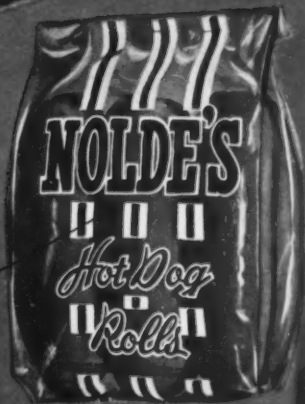
are exactly alike. You may need something entirely new,
or we may already be making a paper that is exactly
right. Just tell us what you want paper to do for you.

Write to **Riegel Paper Corporation**, P.O. Box 170,
Grand Central Station, New York 17, N. Y.

Riegel

FUNCTIONAL PAPERS FOR PROTECTIVE PACKAGING

▶ WRITE FOR SAMPLE BOOK



for "sell on sight" packaging appeal...



CALL YOUR **Milprint** MAN—FIRST!



There's good reason why so many of the nation's top brands are packaged by Milprint—for Milprint packages have the "pick-me-up" look that attracts and sells customers, keeps merchandise moving to consumers. And only Milprint offers the wide variety of materials and printing processes that mean the right packages for all your package needs. If you want the extra sales volume that improved packaging can bring, then call on Milprint—for the most complete facilities in the industry, backed by over 50 years of packaging experience.

Milprint INC
PACKAGING MATERIALS
LITHOGRAPHY & PRINTING

General Office: MILWAUKEE, WISCONSIN • Sales Offices in Principal Cities

printed cellophane, pillow, polyethylene, acetate, glassine, foil,
folding cartons, bags, lithographed displays, printed promotional material

This insert printed by Milprint



She doesn't want a package !

Yet retailers and manufacturers everywhere agree that today good packaging is vital to volume turnover.

A package with shelf appeal catches the eye, suggests purchase, but the consumer buys the *product*—not the package, so she wants to see what she's buying. Transparent protective packaging is the answer. Glamourising the product, it fosters the impulse to buy. Revealing the product, it clinches the sale.

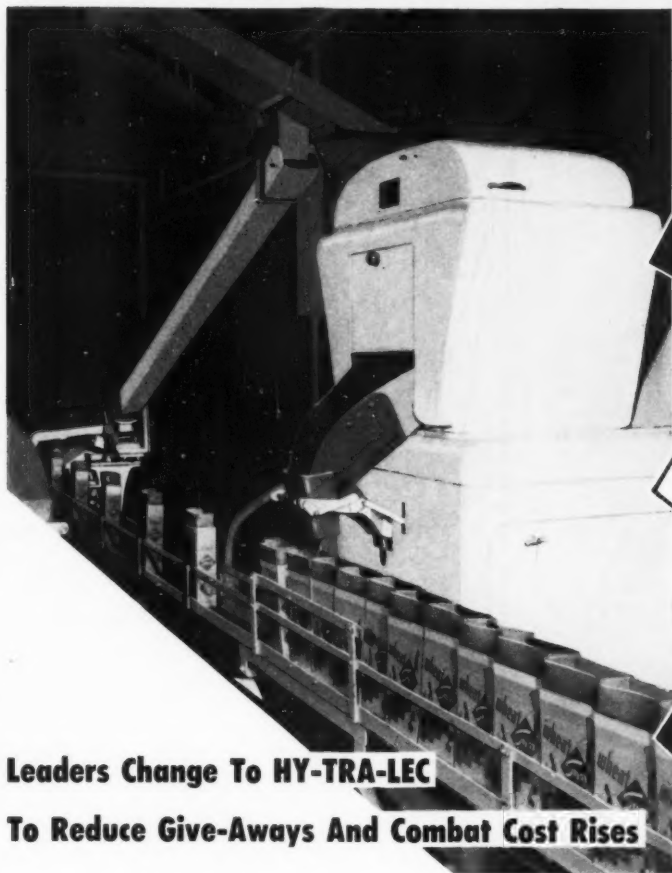
This is the reasoning behind today's ever increasing demand for cellulose film which we, as the largest exporters of cellulose film in the world, are now striving to satisfy.

BRITISH CELLOPHANE LIMITED

Sales Offices : 17/19 STRATFORD PLACE, LONDON, W.1, ENGLAND

Reg. Offices and Factory : BATH ROAD, BRIDGWATER, SOMERSET

REVOLUTION IN THE CRACKER INDUSTRY!



Leaders Change To HY-TRA-LEC To Reduce Give-Aways And Combat Cost Rises

Cracker and biscuit makers are old timers in packaging progress. When they change weighing systems it is significant. **38 percent of all crackers and biscuits of the dump-fill variety are now weighed and filled by Wright Hy-Tra-Lec Model CE weighing system. . . . introduced just two years ago!**

HY-TRA-LEC is that new method of weighing which utilizes the principles of "positive displacement". The particular model used on fully automatic lines in the cracker-biscuit industry consists of two units. The first prefills the box to within 98 percent of desired weight. The second fills the box at a single file rate to within 99-100 percent of exact weight.

Leaders such as National Biscuit Company, Megowen-Educator Company, and United Biscuit Company divisions use Hy-Tra-Lec to reduce over-weights and to combat material and labor cost rises.

Cracker-biscuit makers still using old methods are invited to get complete information on this new type weigher. *We also invite inquiries from other industries who desire a more accurate, high speed weighing system.*

NO OBLIGATION . . . MAIL TODAY!

WRIGHT MACHINERY COMPANY, 500 CALVIN STREET
DURHAM, NORTH CAROLINA

Please send me latest literature on your Hy-Tra-Lec weighers.

NAME

COMPANY

ADDRESS

CITY STATE

PRODUCT

WRIGHT MACHINERY COMPANY

ESTABLISHED 1893 • DURHAM, NORTH CAROLINA
SUBSIDIARY OF THE SPERRY CORPORATION



COMPANY SALES OFFICES: JERSEY CITY • BOSTON • DURHAM
KING & ANDERSON, SAN FRANCISCO EDWIN F. DELINE COMPANY, DENVER
R. P. ANDERSON CO., DALLAS SPERRY GYROSCOPE CO., LTD., LONDON

A Star Quartet of Economical, Sales-Building Packages for Your Products



Bemis Deltaseal®

—This long-time favorite has exclusive pull-cut-pour spout. Billboards your brand . . . and flat tops and bottoms help build excellent mass displays.



Bemis Deltaphane®

—If your trade prefers a window package, Bemis Deltaphane, with the "picture window," is your best bet. Your brand in crisp, bright colors on all four sides. Has the pull-cut-pour top, too.



Bemis Cellophane

—There's an increasing demand for the *show window* bags—Bemis Cellophane. Bemis' bright, eye-catching printing makes your brand shine like a headlight.



Bemis Flexi-Carton®

—Sturdy, gusseted bag, single-, 2- or 3-ply. A fine shelf package, with your brand printed on all sides. Closures: sewing, taping, stapling, pasting.

Here's another bonus for you . . . Bemis Deltaseal Packaging System closes all of these types of bags (except Flexi-Carton), so you can meet the varied demands of your trade. Deltaseal Packaging System is the most economical packaging operation for you . . . proof on request.

Bemis is also your best source for Burlap, Cotton, Multiwall, Paper and Waterproof Bags. Ask your Bemis Man for the complete story.

Bemis

THERE'S A BEMIS PLANT OR SALES OFFICE NEAR YOU—

Baltimore • Boise • Boston • Brooklyn • Buffalo • Charlotte • Chicago • Cleveland
Denver • Detroit • East Pepperell, Mass. • Houston • Indianapolis • Kansas City
Jacksonville, Fla. • Los Angeles • Louisville • Memphis • Minneapolis • Mobile
New Orleans • New York City • Norfolk • Oklahoma City • Omaha • Peoria
Philadelphia • Phoenix • Pittsburgh • St. Louis • Salina • Salt Lake City • Seattle
San Francisco • Vancouver, Wash. • Wichita • Wilmington, Calif.



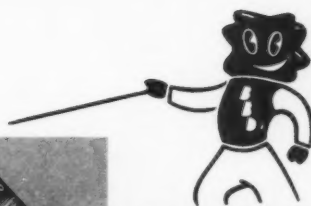
*For aniline printing
on any stock
... any
package*

**USE
BBD
tailor-made
INKS**

BBD INKS are your answer to clean, sharp, color-rich printing on any aniline press—with or without metered inking rolls—because BBD specializes in inks for aniline printing. Furthermore, BBD INKS are "tailor-made" for your special needs to assure maximum color-strength, hiding power, adhesion, flexibility and fade-resistance. BBD ANILINE INKS are available in either pigmented, dye-stuff or combination formulations... for any packaging stock... and are made to comply with every food packaging safety requirement.



*When it's an aniline ink problem...
call in an aniline ink specialist
for famous BBD "shirt-sleeve" technical assistance.
Contact your nearest BBD office
or write direct to Bensing Bros. and Deeney,
3301 Hunting Park Avenue, Philadelphia 29, Pa.*



◀ **CELLOPHANE**

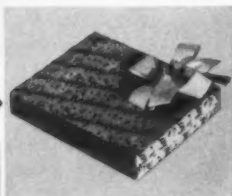
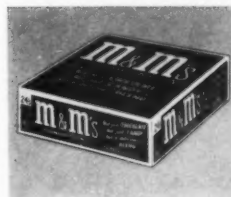


GLASSINE ▶



◀ **FOIL**

TISSUE ▶



◀ **BOXBOARD**

KRAFT ▶



BBD has a proved-in-use ink for every aniline-printable stock... including ACETATE, POLYETHYLENE and VINYL FILMS; PLIOFILM, PARCHMENT, LINERBOARD, CORRUGATED DISPLAY PAPERS, etc.



Bensing Bros. and Deeney

SALES COMPANY

World's Largest Makers of Aniline Ink

PHILADELPHIA • CHICAGO • WAKEFIELD, MASS.

Pacific Coast: A. M. BOJANOWER, Los Angeles

Export: McLAURIN-JONES CO., New York

Canada: MANTON BROS., Toronto

For Beautiful Protection

VENESTA

*Aluminium
Foil*

Full protection plus attractive appearance is achieved
for innumerable products by wrapping in
VENESTA PRINTED ALUMINIUM FOIL

Highest quality always proves cheapest in the long run.
Discerning buyer will find that he is best served by
placing his orders with Venesta Limited, producers of this foil.

VENESTA LIMITED

Vintry House, Queen Street Place, London, England, Cablegrams: "Venesta, London"





with a Tonic of





CHRONICLE OF THE
HISTORICAL SOCIETY

Kronicle

THE HISTORICAL SOCIETY OF THE CITY OF NEW YORK
PUBLISHED BY THE SOCIETY



Are You Missing The Selling Punch of an *Acetate* Window?

A Celanese* acetate window sells more because it tells more . . . gives a product sparkling showcase of its own. Celanese acetate is flat-smooth . . . dimensionally stable so that not a wrinkle or pull line mars its crystal transparency.

Celanese acetate always looks crisp and new. It keeps long-shelf-life-items

looking like fresh stock. Write for new edition of Celanese Acetate Transparent Film Booklet. Celanese Corporation of America, Transparent Films Dept. 108D, 180 Madison Avenue, New York 16, N. Y. In Canada, Canadian Cellulose Products, Ltd., Montreal and Toronto.

nearly everything that sells, sells better in a Window Box



Celanese*

Acetate

TRANSPARENT FILMS

*Reg. U. S. Pat. Off.



A. M. STEIGERWALD

Gold and Silver

FOIL

embossed

Seals

HOW WOULD EMBOSSED FOIL SEALS LOOK?

The sketches we design give a perfect picture of how much beauty and dignity foil seals add to the products, anniversary, convention or similar events. How would embossed foil seals look? It's so easy to find out . . . **FREE!** with the coupon below.

IT'S EASY TO FIND OUT **FREE!**

How would foil seals look? On products, letterhead, labels, seals or booklet

Please send me a sketch on ☐ GOLD ☐ SILVER foil approx. size.....with the following copy

My Name

Company

Address

City

Approx. Quantity

Designers and Producers of Fine Labels



*GUMMED or UNGUMMED • HEAT SEAL
PRESSURE SENSITIVE **ALL AT LOWEST PRICES**

**a. m. steigerwald
company**

910 W. VAN BUREN ST., CHICAGO 7, ILL. TAYLOR 9-5400

**The same offer is good for other types of Labels*

MINNEAPOLIS
The Labarthe Company
3329 DuPont Ave., So.

CHARLOTTE, MICH.
Mr. L. M. Clark
612 So. Pleasant St.

CLEVELAND
A. C. Foster & J. S. Foster
310 Hippodrome Bldg.

OAKLAND
Jean S. Ponton Company
600 Sixteenth St.

MEMPHIS
Flexible Tape Co.
270 S. Front Street

ST. LOUIS
The Marvin Yates Company
Arcade Bldg.

LOUISVILLE
Practical Products
416 Jefferson St.

NEW YORK, N.Y.
John H. McLaren
644 W. 125th St.

THE "BANKS" LABELLER



Of Unique Design and Principle. A High Speed Fully Automatic BODY LABELLING MACHINE for Cylindrical Containers, Fitted with Electric "No Bottle — No Label" Device.

Precision labelling from 2,400 — 10,200 units per hour using one label stack only.

The "Banks" Labeller is simple to operate, occupies very little space, and positions the labels positively, accurately, and without any trace of surplus gum beyond the edges of the label, irrespective of the label shape or size.

Change from one size of container to another is obtained in a matter of seconds.

Cleaning down takes only a few minutes.

All models arranged for conveyor feed, or, alternatively, Patented Automatic Infeed

Rotary Tables. The machine illustrated is fitted with Patented Automatic Infeed Rotary Table and is labelling penicillin vials.

Manufactured in 6 models suitable for use in breweries, mineral water, food, cosmetic and chemical factories, and the like.

Each model will label all round or part up to the label width capacity of the machine, from $\frac{1}{2}$ " up to 12" wide.

MODEL B. L. M. 3 { will fix back
MODEL B. L. M. D. } and front labels

Over 1,000 machines are at work in or on order for THIRTY Countries and 174 Towns and Cities in Great Britain.

Manufactured by Morgan Fairest Ltd., Sheffield, England



STOKE & SMITH CO

PACKAGING MACHINERY

PAPER BOX MACHINERY

Frankfort

Philadelphia 24, U.S.A.

Subsidiary of

Food Machinery and

Chemical Corporation



RADO PACKAGES

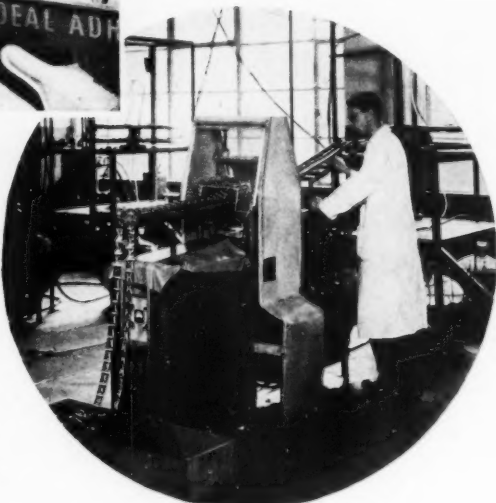
**OPEN
AMAZING
NEW
SALES
POSSIBILITIES**

RADO PACKAGES* are the sort of things Sales Managers and Marketing Directors dream of but rarely find—practical, radically new, low-cost packages that ideally lend themselves to all-out consumer promotion.

RADO PACKAGES are *all plastic*. They are made automatically and continuously from a wide range of thermoplastic materials, both clear and opaque. The packages are made and filled simultaneously and can be of regular or irregular shape.

Equally suitable for liquids or pastes, RADO PACKAGES can even be produced in the form of unique capless collapsible tubes which have self-sealing apertures.

If you feel your product could benefit from this *new type of packaging* that is novel, practical, low-cost and wonderfully responsive to consumer promotion, write to the Main Office of Technopol Laboratories, or to the Packaging Service Station nearest you for additional facts.



Type "A" Packaging Machine

*U.S.A. Patent Nos. 2,517,027, 2,530,400

British Patent Nos. 599174, 599183

Patented in 36 other countries. Other patents pending.

TECHNOPOL LABORATORIES LIMITED

Tel: London Wall 9452-9453 • 212 St. John Street, LONDON, E. C. 1, England • Cables: Telabor, London

Factories and Packaging Service Stations:

UNION OF SOUTH AFRICA
UNIVERSAL PLASTIC
PACKS (PTY.) LTD.
43/44, Menteith House,
Smith Street, DURBAN.

SWITZERLAND
GISIGER & CO.
Office: Claridenhof,
Dreikönigstrasse
21,
ZÜRICH. Tel:
(061) 27.24.47/
25.00.30.
Factory: Obfelden.

AUSTRIA
Tupla Gesellschaft, Vienna,
IV., Wiedner Hauptstrasse 8
Telephone: A 34067

FRANCE
(Algiers, Tunis, Morocco)
S. E. P. (Soc. d'Emballages
Plastiques)
Office: 27 Rue Notre-Dame-
des-Champs,
PARIS 6*. Telephone
ODEON 71-55.
Factory: 24 Avenue de la
Republique, CHATOU,
France. Tel: 274.

BELGIUM
(Holland, Luxemb'g, Belgian Congo)
S. E. P. (Soc. d'Expansion des
Matières Plastiques)
Office: 41 Rue de La Val-
lee,
(Onderbergen),
GAND.
Tel: 594.96.
Factory: 65-7 Rue de
l'Agrafe,
Anderlecht,
BRUSSELS.
Tel: 22.19.32.

EIRE
TECHNOPOL PACKAGING
SERVICES, 81/2 Aungier
Street,
DUBLIN. Tel. Dublin 53524

Unacclaimed by
the trade

Stein-Hall develops amazing new glue for Carton Sealing

STEIN-HALL & CO., INC. has released for general sale a new high-speed carton sealing glue. Called "CART-N-SEEL 233H", it is the result of two years of laboratory research and field tests, and is available in prepared, ready to use form.

Cart-N-Seel 233H has been tested on all types of board normally used for carton-ing all kinds of grocery products, and on all well-known makes of packaging machinery.

Packaging Speeds Increased

The new glue not only gave outstandingly successful adhesion in every test, but enabled customers to speed up their machines. In several instances packaging departments were able to set new production records. One concern was able to speed up top and bottom sealing on their latest type machines to a point far in excess of the speed claimed for the machine by its manufacturers.

In spite of the superior results received from CART-N-SEEL 233H, the new glue

costs no more than ordinary carton sealing glues.

Also available is a heavier version of the glue, CART-N-SEEL 233HH. This may be diluted with water to any desired consistency.

Has Other Uses

Both 233H and 233HH have also been tested exhaustively for other packaging operations, such as case sealing, tight wrapping, and double package making. In every instance, the results were definitely superior to those obtained from ordinary glues.

The superintendent of one very large plant stated: "233H has given me the best tight wrapped package I've turned out in 25 years."

Additional information may be obtained from the national headquarters of Stein-Hall & Co., Inc. at 285 Madison Ave., New York 17, N. Y., or any of their 16 branch offices in principal cities of the United States and Canada.

one glue
for many
operations

dozens
of new
users
agree

for trial run
fill in this coupon →

STEIN HALL & CO., Inc., Dept. MP-4
285 Madison Ave., New York 17, N. Y.

Please ship us 5 gallons of CART-N-SEEL 233H at quantity price. We understand if we are not fully satisfied we may return any unused portion at your expense and obtain full credit.

COMPANY.....
ADDRESS.....
CITY..... STATE.....
PER..... TITLE.....
MACHINE.....
OPERATION.....

Modern packaging



another **EYEOMATIC**
nominated for "HALL of FAME"
by *Modern packaging*

★ The present **Carnation Evaporated Milk** label was developed by U-S packaging designers. Thus, the Carnation label called for the complete range of U-S organization services, from design to delivery. This design provides better shelf display, a better arrangement of the elements of the label, making the product and use information easier to find, all without losing the brand identification of the previous label.

Repeated recognition of U-S services indicates the experience, the skills, and the coordination which are applied to every assignment that comes to U-S.



THE UNITED STATES PRINTING AND

EXECUTIVE OFFICES: CINCINNATI 12, OHIO • Sales Offices in Principal Cities • PLANTS: Baltimore, Md. • Cincinnati, Ohio • Erie, Pa.

package

Previous "HALL OF FAME"
Nominations of EYE-O-MATIC
packages

- BAKER'S COCOA—label—1950
- FOUR ROSES WHISKEY—label—1950
- MCCORMICK EXTRACTS—label—1950
- WRIGLEY SPEARMINT CHEWING GUM—
labels and display cartons—1950
- GILLETTE BLADES—folding carton—1951
- PADST BLUE RIBBON—label—1951

The U-S organization is nationwide. We welcome an opportunity to discuss your packaging interests, your point-of-sale advertising, as well as your other uses of superlative color reproduction.

Our sales-service offices are nearby to everywhere.

LITHOGRAPH CO.

Minneapolis, N. Y. • Redwood City, Cal. • St. Charles, Ill.

VITAMIN D INCREASED • HOMOGENIZED

EVAPORATED MILK



Carnation

NET WT. 14 1/2 OZ.
EQUIV. 13 OZ. LIQUID

• VITAMIN D

The Vitamin D content of Carnation Milk has been increased by the addition of pure cod liver oil. This provides a source of Vitamin D₃ to a unit per fluid ounce, or 400 U.S.P. units per fluid ounce, in each half milk. According to nutrition authorities, this provides adequate supply of Vitamin D for infants, child and adult.

CARNATION COMPANY
Los Angeles, Calif.
U.S.A.

Carnation

EVAPORATED MILK

"FROM CONTENTED COWS"

• SATEGUARDED QUALITY—Sealed, meeting all Government standards. Carnation quality is specially safeguarded (1) by protection of source, (2) by thorough rigid supervision of processing, (3) by thorough sterilization after sealing in oil-tight cans.

• UNSWEETENED
• SAFE MILK
• FOR BABIES

• COOKING, ETC.—Carnation Milk is whole milk evaporated to double richness, homogenized, a part of which is added to water to make a perfect smooth cream. Adding one part of water to one part of Carnation Milk makes a perfect whole milk. Use Carnation for whole milk. Use as above for dehydrating and in milk cooking for coffee, fruit and cereals. Carnation Milk undiluted for coffee, fruit and cereals.

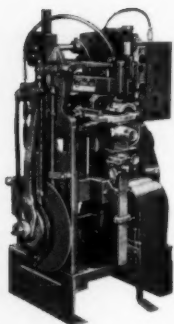
CARNATION COMPANY
Los Angeles, Calif., U.S.A.

Carnation is a staple food for babies and children — safe, nutritious, easily digested. Add to your diet. Carnation should be supplied from other sources. Carnation is a staple food for babies and children — safe, nutritious, easily digested. Add to your diet. Carnation should be supplied from other sources. Carnation is a staple food for babies and children — safe, nutritious, easily digested. Add to your diet. Carnation should be supplied from other sources.

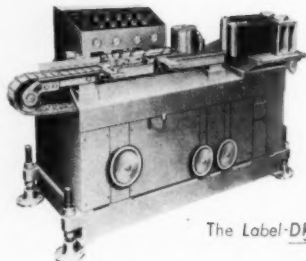


114—PDRG—MIL—U.S.

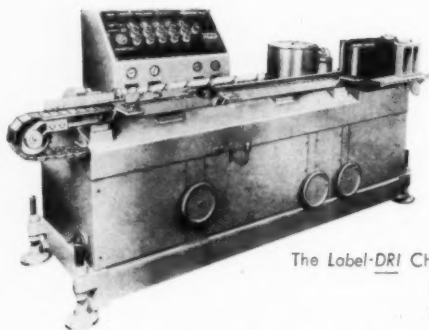
Choose your labeler from the Label-DRI® family—



The PONY Label-DRI
up to 60/m



The Label-DRI CHALLENGER
up to 150/m



The Label-DRI CHAMPION
up to
300/m

**EVERY HOUR IS ALL PRODUCTION TIME
with NO DOWNTIME for glue preparation!**

Here's why DRY LABELING
makes Glue obsolete...

Dry labeling—done on the Label-DRI means that your labels—coated with plastic adhesive attain perfect tackiness through an accurately controlled heating element. They are literally bonded to the package, from edge to edge.

With glue, you have no such sustained performance. Too much water causes blisters and imperfect adhesion. Too little water causes excess adhesive, glue seepage and crystallization.

Only when the perfect balance of water and glue is contrived, do you get the results wanted. It takes constant care, and frequent interruptions for mixing or adding glue or water, to keep such equipment operating. With morning preparation, and evening clean-up, you lose approximately 40 minutes a day. Which, at even 100/m lowers production volume by 4,000 units per day.

Only DRI LABELING—the Label-DRI eliminates these many lost minutes. It delivers more work because every hour is productive—with no downtime, and no variables to fight.

Try the DRI-way!

Write for complete details!

911

NEW JERSEY MACHINE Corporation

AUTOMATIC LABELING • PACKAGING

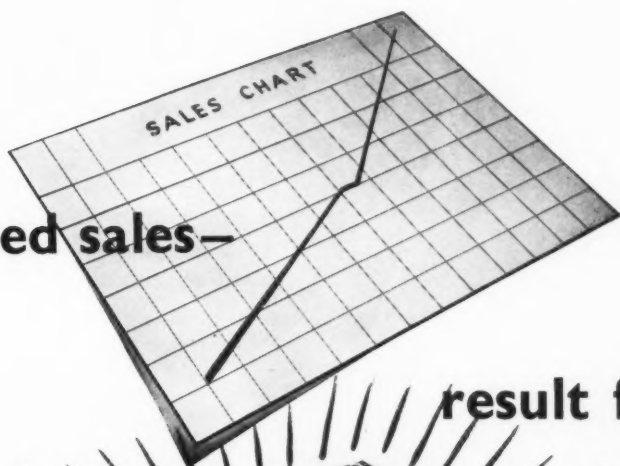


PAPER BOX MACHINERY • MAKERS OF THE PONY LABELRITE

FACTORY SALES AND SERVICE BRANCHES
325 W. HURON ST., CHICAGO 10, ILL.
1701 CAREW TOWER, CINCINNATI 2, OHIO
2500 W. 6TH ST., LOS ANGELES 5, CAL.

MAIN OFFICE & FACTORY: 1510 WILLOW AVENUE, HOBOKEN, N. J.

increased sales—



result from—

the spa



**of aluminium
foil wrapped
packages**

Every quality available for your individual product.

Natural foil wrapping or laminated with
tissue, paper, board or wax. Please

write for samples and price information.

 **FISHER'S FOILS**
FISHER'S FOILS LTD • EXHIBITION GROUNDS • WEMBLEY • MIDDLESEX • ENGLAND
Telephone : WEMBLEY 6011
Cables & Grams : LIOFNIT WEMBLEY (ABC Code 6th Edition)



*What's your
problem?*

WHATEVER special qualities you need in paper for packaging—whether it's paper to provide greater flavor protection, strengthen dimensional stability, improve moisture resistance, or otherwise help increase the salability of the product—you'll find Brown Company's Technical Service Division of real help.

For more than half a century Brown Company has been developing special Nibroc papers for special packaging purposes—papers that have not only improved packaging performance, but have also affected substantial processing economies.

Write Dept. DR-4 at our Boston office.

Our entire production of papers is sold directly to converters.

BROWN



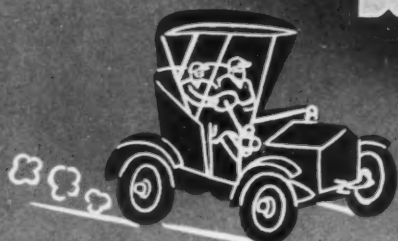
COMPANY, Berlin, New Hampshire
CORPORATION, La Tuque, Quebec

General Sales Offices: 150 Causeway St., Boston 14, Mass.—Dominion Square Bldg., Montreal, Quebec

SOLKA & CELLATE PULPS • SOLKA-FLOC • NIBROC PAPERS • NIBROC TOWELS • NIBROC KOWTOWLS
ONCO INSOLES • CHEMICALS • BERMICO SEWER PIPE, CONDUIT & CORES

FROM HORSELESS CARriage DAYS

1912



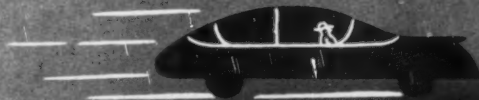
In a short span of forty long years,
we have seen the horseless carriage be-
come a museum piece and the atomic
energy age a reality. We take great
pride in celebrating our anniversary and feel sure
that, through our accomplishments
from countless effort and acquired ex-
perience, our future will not be that
of a museum piece, but of an ener-
getic organization capable as always
to continue serving our patrons

40
YEARS

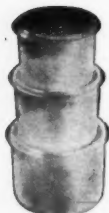
Sincerely

Olive Can & Company

Chicago 10, Ill.



To 1952



Tupper Seal, air and liquid tight flexible covers fit, and are included in the sets of all Tupperware Canisters.



The Tupperware 50 oz. Canister is "standard equipped" with the Tupper Seal, air and liquid-tight flexible Pour All cover.



The Tupper Seal, air and liquid-tight flexible Pour All cover is used on every Tupperware 20 oz. Canister.



The Tupper Seal, air and liquid-tight, Pour All cover as a cover for 46 oz. cans; Tupperware Sauce Dishes and other containers of metal, glass or pottery. Foods easily dispensed without removing entire cover.



The Tupperware Wonder Bowls are usually fitted with Tupper Seal, air and liquid-tight covers.



FACTORIES: Farnumville, Mass., and Cuero, Texas

Manufacturers of - CONSUMER, INDUSTRIAL, PACKAGING AND SCIENTIFIC PRODUCTS

New York Show Rooms 225 Fifth Ave.

ADDRESS ALL COMMUNICATIONS TO: Department MP-4

COPYRIGHT TUPPER CORPORATION 1950



TUPPER! Seals

air and liquid-tight, flexible covers for Tupperware Tumblers, Canisters, Wonder Bowls, Cereal Bowls and many another container of glass, metal and pottery, the contents of which it is desired to keep fresh and wholesome.

TUPPER!

FORMAL NOTICE

9th November, 1949

EXCLUSIVE!

U. S. Patent #2,487,400

The Tupper Corporation has attained a position of leadership in this industry by incurring great expense and expending painstaking effort in the development, design, manufacture and exploitation of its many world-known products.

The Tupper Corporation further has anticipated the inevitable attacks to which leadership is subject and has taken measures provided by law to preserve the creative rights to its products, methods and design by patent protection both in the United States and abroad.

Tupper Seals for Tupperware shown in this advertisement are just a few of the forms covered in this manner and are specifically covered by U.S. Patent #2,487,400.

Only the Tupper Corporation, by U.S. Patent #2,487,400 has the right to make, use and vend container closures in connection with any and all types of containers throughout the United States and its territories as covered by the claims of the Patent.

Tupper Corporation will protect, according to law, the exclusive rights above granted

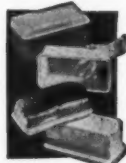
TUPPER CORPORATION

TUPPER CORPORATION



There's a Tupper Seal, air and liquid-tight flexible cover for Tupperware 2, 5, 8 and 12½ oz. Tumblers too, and these Tupper Seal, covers fit many other containers of metal, glass and crockery.

The Tupper Seal, air and liquid-tight flexible Pour Top cover, specially designed as a dispensing cover for specified diameters of containers holding foods such as syrups, salad dressings, catsup.



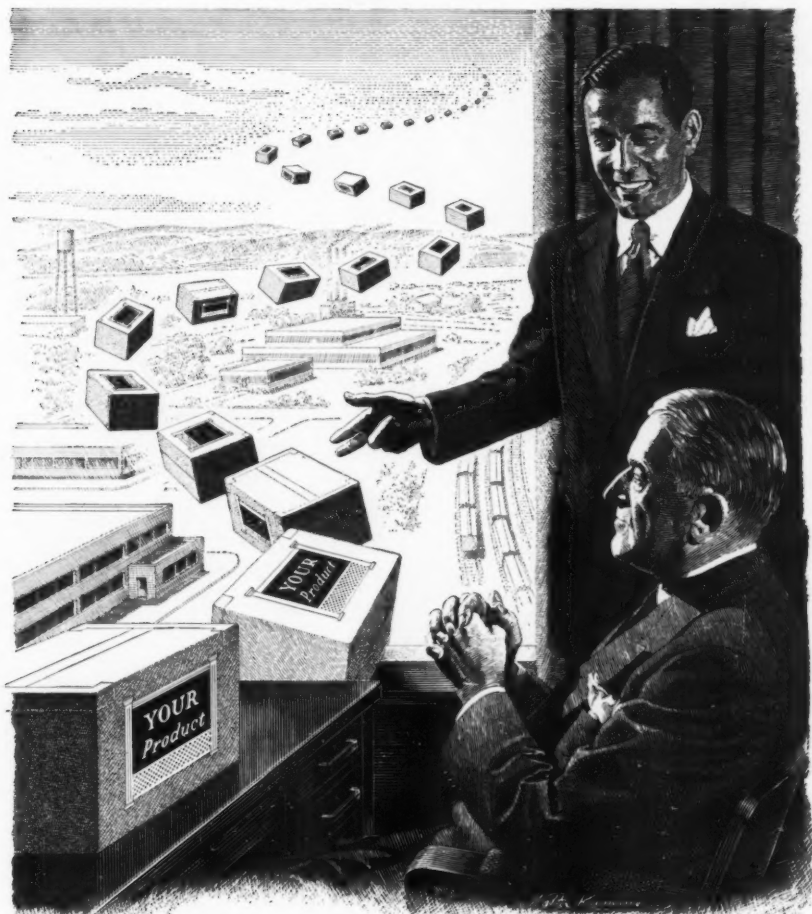
The cover of the Tupperware Bread Server which serves as a bread tray also is designed to give similar results as Tupper Seal, air and liquid-tight Flexible covers. Keeps contents fresh as no other such container.



When equipped with Tupper Seal, air and liquid-tight, flexible covers, Tupperware Cereal Bowls serve many another purpose.



The Tupper Seal, air and liquid-tight flexible cover made for Tupperware 8 oz. Tumblers also fits and is sold with all Tupperware Funnels as a base when funnels are used as storage containers.



Gaylord Boxes Give You Extra Sales Messages

They're Traveling Billboards

Shipping containers carrying your trademark, sales message or slogan provide extra sales contacts. And they provide unusual opportunity for seasonal merchandising or special promotion deals.

Because good first impressions are good business it pays to ship your products in distinctive Gaylord Boxes.

For helpful information on "advertising on the move" get in touch with your nearest Gaylord Sales and Service office.

*It's the unseen quality
that gives you the extra
margin of safety in*



GAYLORD CONTAINER CORPORATION

General Offices: **SAINT LOUIS**

CORRUGATED AND SOLID FIBRE BOXES • FOLDING CARTONS • KRAFT BAGS AND SACKS • KRAFT PAPER AND SPECIALTIES

New York • Chicago • San Francisco • Atlanta • New Orleans • Jersey City • Seattle • Indianapolis • Houston • Los Angeles • Oakland • Minneapolis • Detroit • Columbus
Fort Worth • Tampa • Dallas • Cincinnati • Des Moines • Oklahoma City • Portland • Greenville • St. Louis • San Antonio • Memphis • Kansas City • Bogalusa • Chattanooga
Milwaukee • Westaco • New Haven • Amarillo • Appleton • Hickory • Greensboro • Sumter • Jackson • Miami • Omaha • Mobile • Philadelphia • Little Rock • Charlotte • Cleveland

Vanant Packaging Engineers...

can simplify your military packaging problems

Vanant field specialists are thoroughly qualified to interpret the latest JAN, AN, MIL and Federal Specifications as they relate to your specific packaging problem.

These men can coordinate and supply all your packaging requirements — including those for case liners — to assure full compliance with all government regulations.



Call These VANANT Representatives On Your Packaging Problems

King & Anderson
1355 Market St.
San Francisco 3, Calif.

Jerry Goldsmith & Associates
1604-S Munsey Bldg.
Baltimore 2, Md.

Allied Commodities Co.
Andrus Bldg.
Minneapolis 2, Minn.

W. T. Segerstrom
332 1st Avenue N.
Seattle 1, Wash.

Jerry Goldsmith & Associates
630 Washington St.
Reading, Pa.

Packaging Materials Co.
431 E. Burleigh St.
Milwaukee 12, Wisconsin

Allied Commodities Co.
Kansas City Merchandise Mart
Kansas City 8, Mo.

Leonard Baral & Associates
1502 Finance Bldg.
Philadelphia, Pa.

King & Anderson
3635 N. Fletcher Dr.
Los Angeles, Calif.

William Diemer & Co., Inc.
274 Madison Avenue
New York 16, N. Y.

Standard Parts & Equipment Co.
904 N. Main - P.O. Box 4385
Fort Worth, Texas

R. M. Reutlinger & Associates
Hulman Bldg.
Dayton, Ohio

Protective Packaging Co.
542 S. Dearborn St.
Chicago 5, Ill.

William Diemer & Co., Inc.
10735 N.E. 9th Ave.
Miami 38, Florida

Get Your

SPECIFICATION HANDBOOK

An easy-to-read guide to the most generally used government specifications on the preservation and packaging of defense materials. Each copy is registered and automatically kept current by Vanant Field Engineers.

VANANT

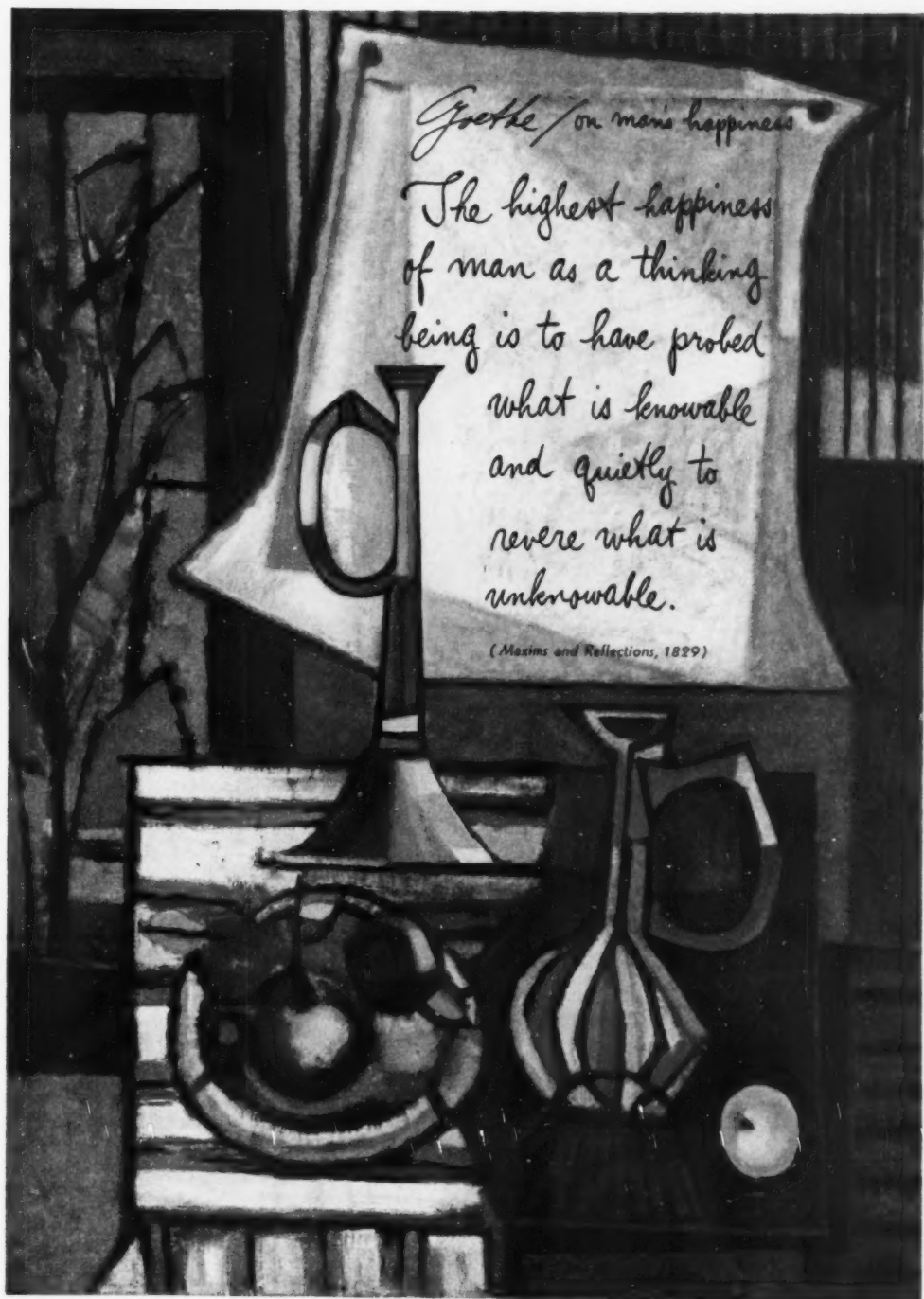
ENGINEERED PACKAGING

**VANANT PRODUCTS 730 W. Virginia St.,
Milwaukee, Wis. Plant Tomah, Wis.**

Converters of Military Specification

BAGS BARRIERS CASE LINERS

Polyethylene and
Other Transparent Films



Artist: Robert Brady

GREAT IDEAS OF WESTERN MAN...ONE OF A SERIES

CONTAINER CORPORATION OF AMERICA



APRIL 1952



NASHUA

NASHUA CORPORATION

formerly known as

NASHUA GUMMED AND COATED PAPER COMPANY

*For the convenience of our customers, suppliers and
other business friends, we have shortened our company name*

Creative Packaging in Printed Film, Waxed Wrappers, Box Papers, Box Stays, Heat
Seal Papers, Flocked Products, Party Papers, Printed Bands, Corrugator's Tape, Seal-
ing Tape, Moistening Machines, Technical Paper Products.

NASHUA CORPORATION, NASHUA, NEW HAMPSHIRE

Modern packaging

The war on costs

THROUGH STANDARDIZATION, MECHANIZATION AND ORGANIZATION,

SHARP & DOHME HAS WON A VICTORY THAT SHOULD INSPIRE OTHERS

Financial reports today are falling into a discouragingly similar pattern, something like this:

"Although sales increased to an all-time high, net income declined due to higher operating costs and increased taxes."

Not much can be done about the taxes—and for that very reason the inroads that higher operating costs are making into profits, despite steadily rising sales, have become a very serious concern to managements of packaging companies.

Many firms undoubtedly believe they have already reduced their packaging costs to a minimum through efficient operation. But when an alert and progressive packager like Sharp & Dohme, by a further overhauling and tightening of its packaging operation, is able to report a saving of close to a half-million dollars, it seems apparent that the door should never be closed to efficiency studies. Obviously, the point of perfection is never reached; in a field as volatile and ever-changing as packaging, new opportunities for economy and efficiency always exist.

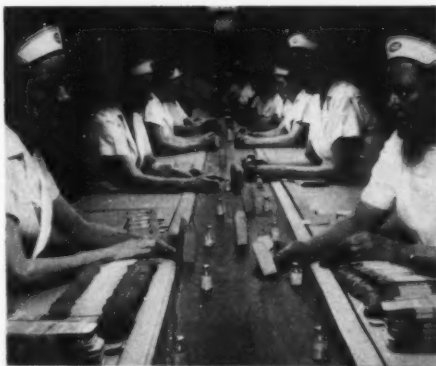
Through changes in its packaging operations during 1950 and 1951, Sharp & Dohme, the 108-year-old Philadelphia drug firm, reports savings of \$391,000. For a firm with annual sales around \$45,000,000, this amount is significant.

The Sharp & Dohme program will be discussed here merely as an ex-

ample of what is being done by some wide-awake packagers today—and what can be and should be done by many others.

It shows what can be accomplished when management gives proper attention to packaging operations as a dis-

tinct division of the manufacturing processes and sets up the proper organization whereby all packaging activity and production can be coordinated. Actually, it has been only in recent years that packaging has been given this emphasis by manage-



MECHANIZATION of cartoning now saves Sharp & Dohme thousands of dollars, but slow hand operations could not be eliminated until standardization and simplification justified automatic installations for packaging.



ment. And Sharp & Dohme's experience points up forcibly how essential proper organization of packaging functions is today in view of rapid advances in mechanical production, the constantly growing variety of packages demanded for today's competitive merchandising and the ever-widening variety of packaging materials.

Over a period of years Sharp & Dohme's business has been growing consistently at the rate of about 10% per year. Each year's new business calls for better and faster-produced packages. But in the company there had previously been no centralized department responsible for the entire packaging process. One division was writing specifications; one was acquiring equipment; another was ordering supplies. And the production department had to make the supplies work on the equipment that had been procured. There were many frustrations because one hand did not know what the other was doing.

The trouble became apparent to Henry W. Gadsden, vice president in charge of operations, about three years ago when certain cartoning equipment did not function in accordance with the outline that had been given him when it was purchased—and when a brand new high-speed packaging machine was standing idle because packages produced on it would have involved the company in litigation for patent infringements.

Accordingly, in 1949, Sharp & Dohme established a new package development department. The person at its head was made directly responsible to management for all packaging activity: (1) design and construction



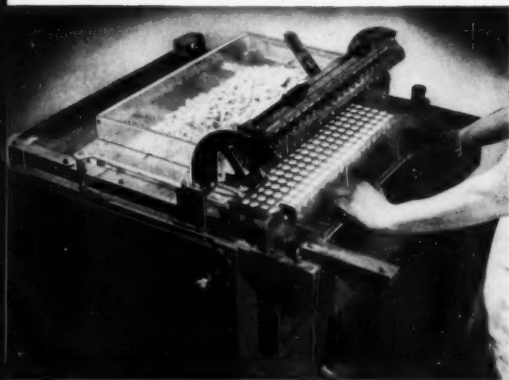
of the package in cooperation with the sales and advertising division, (2) approval of specifications, (3) selection of equipment for producing it and (4) proper functioning of that equipment. If combined supplies and equipment did not perform in accordance with the standards established, then this person was made accountable.

Under this set-up a study was undertaken of the packaging operations for some 800 products. During the years 1950 and 1951, some 52 specific

changes were made through which savings were effected—many of them previously obvious, of course, but which could not be put into effect without all departments working as a team through the proper liaison.

The changes involved a substantial increase in automatic cartoning; complete overhauling and standardization of glass containers, closures, liners, labels, secondary packs and corrugated packers; new equipment for unit packs of physicians' samples; new and faster tablet-filling equipment; changes in printing procedures; changes from tin to aluminum or 7½% tin-lead tubes on many products; metal parts changed to plastic in the company's plasma packaging; redesigned disposable plastic syringes and many other minor modifications that added up to the impressive total.

A saving of nearly \$50,000 alone was achieved as a result of the company's standardization program for glass containers. This came about through a project to improve efficiency in handling powders and tablets by the use of high-speed equipment. Over a period of years, the company had accumulated numerous types and sizes of bottles. Before new equipment could be considered, it was necessary



TABLET FILLER, specially built for a volume item packed in glass shells with polyethylene friction closure—one of the recent developments in efficient mechanized operation now employed.

been reduced to 28



NEARLY \$50,000 was saved as a result of the company's glass container studies, which not only covered bottle sizes, but also included bottle closures, liners, labels, secondary packs and corrugated packers.

to reduce the number of sizes and shapes. By close cooperation with the sales and advertising division, it was discovered that:

62 bottle sizes could be reduced to 28,

15 cap sizes could be reduced to 9. Along with the cap sizes, it was possible to reduce 45 different styles of caps to 14. And at the same time to reduce:

45 label sizes to 9,

27 folding carton sizes to 13,

27 secondary packs to 10,

49 corrugated packers to 24.

In this program, all small rectangular blakes were eliminated and the company is now using all wide-mouthed round bottles in sizes from ¼ oz. to 7 oz. The blakes were omitted for two reasons: their rounded-off narrow bases tipped more easily in production and their flat shapes did not provide as much label area as is possible with small round bottles on which a complete wrap-around label can be used if needed to carry the printing of all the essential informative and mandatory data often required in drug packaging. The wider-mouthed round bottles also permit their use for 5- and even 7½-grain tablets, which were too large for the 18 mm. necks

on the bottles which have been eliminated.

Standard blakes in sizes from 7 oz. to 24 oz. have been retained and are being labeled on the narrow sides, according to today's practice, to eliminate waste space on the prescription shelf. All sizes larger than 24 oz. are round shapes, but only a minimum number of sizes are now inventoried. This simplification permits buying in larger quantities, thereby getting the advantage in many more instances of

minimum prices for purchases over 1,500 gross. It eliminates special orders and molds. It simplifies record keeping, inventory control, greatly reduces warehousing space and permits wider use of printed corrugated reshippers which can be obtained with purchase of larger quantities.

It also brought to light many specific instances where additional small savings could be made. For example, on one item, 7 ft. of cotton coil had previously been inserted into a bottle to protect a certain quantity of tablets. The standardization studies revealed that a smaller bottle would carry the same quantity of tablets and protect them from breakage sufficiently with the use of only about 2 ft. of cotton coil wadding.

Everybody knows that automatic cartoning is an economical packaging procedure when used where there is sufficient production volume to justify it. Sharp & Dohme has adopted automatic cartoning today wherever feasible on large runs and is saving thousands of dollars on this procedure. But automatic production could not be adopted until a standardization and simplification study had been completed.

The company has devised an interesting new way to provide compartments for multiple packs of vials and ampoules in a side-opening folding carton by the use of fabricated polystyrene foam which can be designed to hold the desired number of units with ample rigidity and protection to the pack. An estimated saving of approximately 20% per package has been achieved on this type of pack over previous partitions used.

Certain of the company's competi-

POLYSTYRENE FOAM, fabricated to form insert partitions in folding cartons for vials and ampoules, gives rigidity and protection, saves 20% of cost of previously used package.





UNCARTONED bottles can be shipped in same 12-unit shelf packs as cartoned packages for many products, at considerable savings. Paperboard partitions give protection similar to individual cartons, because partitions are made with twice the thickness of the individual carton stock.

tive products are sold uncartoned. Savings have been effected in packaging them interchangeably in shelf cartons of the same style as those used for individually cartoned items of similar size, but inserting paperboard partitions in the cartons. This procedure provides the same protection as is given to the cartoned items by making the partitions the same thickness as two layers of carton board which would be the protective element between each individually cartoned item. This means a considerable saving, as the partitions cost much less than cartons. And using the same shelf packages interchangeably for several products helps greatly in this instance, too, to simplify inventory and warehousing, and to take advantage of the better price that can be obtained

from suppliers for quantity buying.

In its printing division, Sharp & Dohme has installed its own Mono-type equipment which, the company reports, has enabled the firm to save substantially over type-setting on the outside. The economy of this procedure can be visualized when it is known that as many as 240 specifications for labels or carton printing may be changed in a month. If each of the changes cost only a minimum of \$25, it can readily be seen what such revisions can amount to in a month, unless effective steps are taken to reduce the cost.

The company has investigated the use of plastic printing plates to replace electros and finds that plastic plates are about 25% the cost of electros. Consequently, its own facilities

for producing plastic plates are being installed and the packaging department reports that the printing qualities of plastic plates for its purpose appear to be better than those of electros.

The subject of roll-type labeling is now under consideration as the result of a study showing that it now costs the company something like \$100,000 a year just to handle and check straight or die-cut labels. Roll-type labels applied by machine reportedly would be less expensive, could be automatically coded right on the labeling machine and would reduce excessive handling as well as the possibility of mixed and improper labels. It is known that no matter how careful inspections may be, mixed labels do occur. For long-run production, roll labels, printed and coded right on the labeling machine and applied directly to the bottle, could eliminate almost completely the difficult inventory, as well as the costly handling and excessive inspection that is demanded in the drug field.

Sharp & Dohme is not prepared to say how consistently large savings can be made each year. A point undoubtedly may be reached where future savings eventually may tend to a minimum.

The important fact, however, is that with these progressive steps toward simplification, the company can now consider greater standardization of equipment and take necessary steps to justify new equipment. Its packaging department is prepared to investigate new equipment requiring a minimum of changes. It is aware that high-speed equipment requires a greater maintenance job and is thus eager to keep change-over time down.

With a standardization of supplies, facilities for studying the properties of new packaging materials and establishing uniform specifications, Sharp & Dohme is also in a better position to evaluate new machinery in terms of claimed speeds, change-over time, etc., and to obtain the advantages of maximum efficiency.

The packaging department is now well organized to watch new developments that are constantly being made, to study them from all angles and to put new ideas into effect only when they meet the requirements of the entire packaging cycle from the inception of the new product to the time it comes off the line in an efficient, economical, well-made package.



SEVEN FEET of cotton coil were formerly used to protect a bulk quantity of certain tablets. Standardization studies revealed smaller bottle would amply protect a like quantity of tablets and use only 2 ft. of cotton coil as a filler.



APPROPRIATE SHAPE was suggested by two items in the Sportsman line, solidified after-shave lotion and deodorant, which fit into this spirally wound container. The lithographed wrap reproduces an actual golf bag faithfully. One-piece vinyl strap is laced through slots and secured by friction. Printed die-cut card creates effect of golf clubs.

The novelty package

SPORTSMAN GOLF BAG IS PLANNED AS A GADGET
CONTAINER TO CATCH THE IMPULSE GIFT TRADE

The successful novelty package can often produce sales of several hundred thousand units a year. It can promote sales of related items. It can capture a large number of occasional gift purchases.

To be successful, however, it must be planned with proper counter appeal, must be appropriate for the product or products packaged and within profitable budget limits.

The planning behind the new Sportsman Country Club "golf-bag" package provides an interesting illustration of the way in which a novelty package is launched. In this case, the package started in the mind of a designer who had previously completed a number of Sportsman toiletry packages. Knowing that the firm is continually trying to get new sports "twists" in its packaging and being an ardent golfer, he went to John Hudson Moore, Inc., producer of Sportsman products, with an idea.

Two of the company's products—

Toddy Stick (solidified after-shave lotion) and Sportsman D-Bar (solidified deodorant)—are packaged in cylindrical glass containers. When placed one on top of the other, they suggested the use of an outer paperboard canister resembling a miniature golf bag.

Hand-made samples of such a package were constructed and presented at a meeting of company salesmen. Usually when salesmen take to a novelty idea, its success is considered practically assured. In this instance, enthusiasm was so high that the company had difficulty supplying salesmen with sufficient samples.

The initial problem in the package planning was to search the field for suppliers who could produce the various elements of the package practically, yet maintain the authenticity of a golf bag at a cost low enough.

Selected for the basic structure was a spiral-wound paper tube. The original outer wrap was planned to be a two-tone combination, printed in three

colors by letterpress on embossed leatherette stock. The purpose was to keep the cost of the basic container low to offset the expensive operation of gluing the handle and shoulder straps. It was originally thought that these two pieces would have to be secured separately. Further development, however, showed that the handle and strap could be made in one piece of saddle-colored vinyl sheeting by lacing the handle through slots in the tube where it was held securely when an inner tube was friction-fit within the outer one and beaded at both ends. This obviated the necessity of gluing.

This cut the cost of the handle element so substantially that it permitted the use of a more effective and expensive lithographed wrap. The lithographed wrap reproduces faithfully the feeling of the canvas and leather details of an actual golf bag with highlight and shadow treatment.

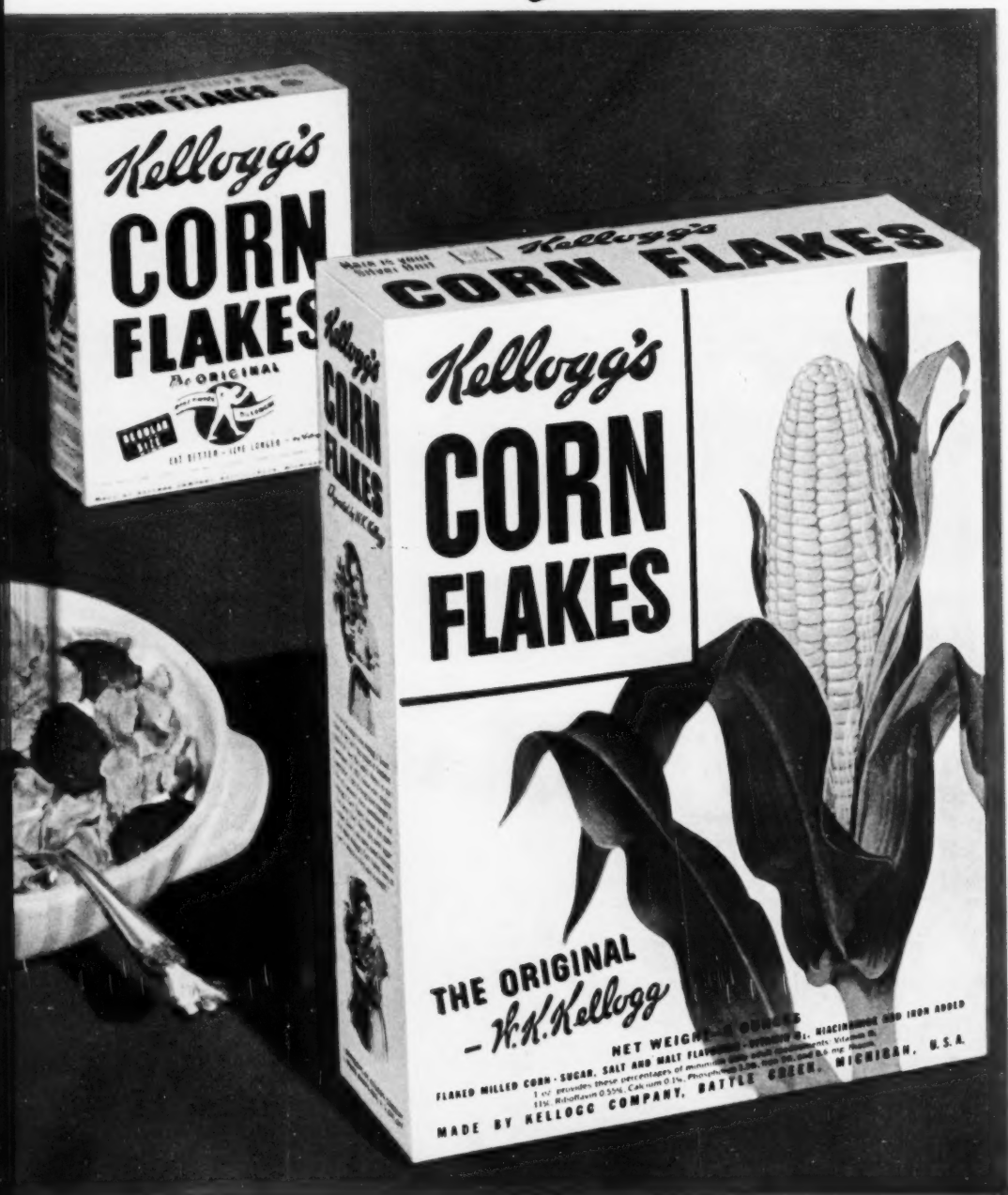
The effect that the bag is filled with woods and irons is achieved by the use of a color-printed, die-cut card which slips down into the container. The string-tag label, reading "Sportsman Country Club," identifies the package with the Sportsman line of men's toiletries and provides a blank area for writing in the "member's" name, thus serving as an attractive gift card. The reverse side of the label identifies the contents of the package. The complete package is sold on the counter from sample and shipped in a chipboard carton.

This new package was introduced in retail outlets during March. Initial orders were increased before the end of the first month.

Diameter of the container is slightly larger than would have been necessary to hold the original items, which are held in place with a flexible corrugated sleeve, so that depending on the continued success of the package, other Sportsman items may be housed in it in the future. In this way Sportsman is prepared to achieve maximum use of the promotional advantages of this clever gift package.

CREDITS: Design, Gilbert D. Snyder, New York. Spiral container, Miro Container Co., Inc., Brooklyn, N. Y. Lithographed wraps, George Schmitt & Co., Inc., Brooklyn, N. Y. Labels, Jackmeyer Label Corp., New York. Bottles, T. C. Wheaton Co., New York. Applied labeling on bottles, Ceragraphic, Inc., Newark, N. J. Closures, Mack Molding Co., Wayne, N. J., using American Cyanamid urea.

Magazine-cover



cartons

KELLOGG'S NEW CEREAL PACKAGES: NEWSY AS THE

MORNING PAPER, THEY KEEP THE STRONG IDENTITY OF A FAMILY FORMAT

In Battle Creek, Mich., they are calling it "K day"—the day this month when Kellogg's completely redesigned line of cereal packages will reach national distribution in food stores across the country.

Giant color presses are turning out bright new faces for all 10 of Kellogg's packaged cereals. The new program is probably one of the most extensive over-all packaging changes Kellogg has undertaken since the company was founded in 1906.* It is not "merely a prettying-up operation for a one-shot promotion," the company states, "but the introduction of fresh new package designs that have tremendous significance for every grocer."

The announced aim of the new packages is to accomplish two things—both of which build sales:

1. Speed the movement of cereals through the store by making the shelf space a grocer gives to Kellogg's cereals work harder for him.
2. Achieve a package modernization and design that is directly related to the display needs of the modern supermarket.

The new packages are reported to take their inspiration from magazine covers. The familiar red and green lettering on white stock which has identified Kellogg products since the beginning remains, but is highlighted in purest form in the upper left-hand corner of the front panel, similarly to a masthead on a magazine cover. This treatment provides a broad area over

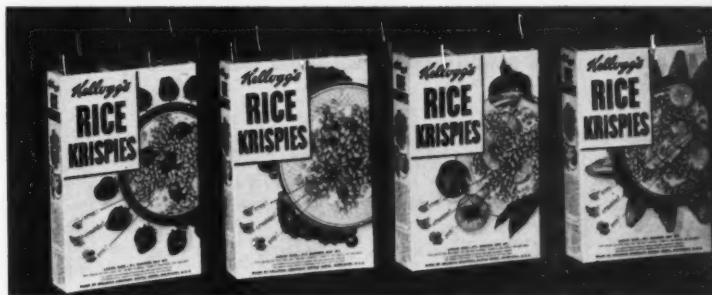
* See *Packaging's Hall of Fame* story, "Kellogg's Corn Flakes," *MODERN PACKAGING*, Feb., 1952, P. 92.

◀ **BASIC ARRANGEMENT** is established by new Corn Flakes package compared with old in background. Familiar identity is highlighted like a magazine masthead in upper left-hand corner. Any illustrative treatment can be used, but format stays the same. Here the picture reminds that flakes are made of finest corn. W. K. Kellogg signature is there; "sweetheart" is revived on side.



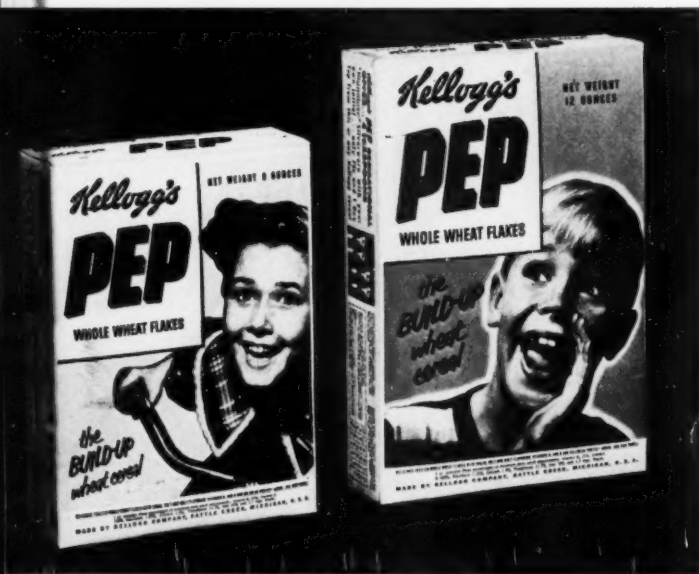
APPETITE APPEAL of cereals with fresh fruits dominates Krumbles, Bran Flakes and Corn Soya packages, but different illustrations can be interchanged for seasonal appeal of strawberries, blueberries, peaches.

PRODUCT STORY of Rice Krispies' "snap, crackle, pop" is pictured like a cover illustration beside logotype—and with a variety of fruits.





HEALTH ANGLE of All-Bran and Pep is conveyed by action photos that are changed from time to time so that no package ever becomes static.



the remaining face of the package for dramatic full-color illustrations of product or various timely devices that can be changed when desired, such as tie-ups with sponsored radio and television shows and other human-interest subjects.

Kellogg estimates that four out of

five U.S. families purchase Kellogg's cereals during an average year—and that although purists of etiquette frown, most folks bring cereal packages to the breakfast table. So—although the packages may never replace the morning newspaper—they are planned to provide interesting

reading on the backs and sides—recipes for Mom; games, cutouts and stories for the children.

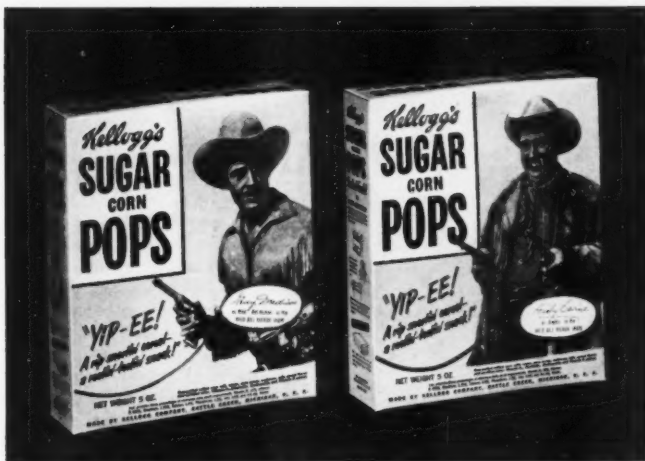
The new "magazine-cover technique" of handling brand and product identity on all the packages in the upper left-hand corner of the carton illustrates an interesting new principle of design flexibility seriously needed in cereal packaging to handle the continually changing "reading" copy that has become such a common practice in the breakfast-food business. Without altering in any way the basic identity of its new packages, Kellogg can introduce new food illustrations, tie-ins with radio and TV shows, or any other type of selling devices, in the same way a magazine cover can be changed for each issue without altering its standard format. All the designing was done by the company's advertising agencies.

The new full-color illustration of an ear of corn on the face of the Corn Flakes package shows that Kellogg still considers "the sweetheart of the corn" no empty phrase. And there is a revival of interest in the "sweetheart" theme on the side panel, giving new emphasis to the fact that the flakes come from the heart of the finest corn. Between a picture of a new sweetheart at the top of the panel and the old sweetheart at the bottom, copy reads:

"Ever since Grandpa's time, Kellogg's 'Sweetheart of the Corn' has smiled at breakfast eaters all over the world. Above is our sweetheart in 1952, below—our original sweetheart. Lots of things have changed in the era between these sweethearts, but Kellogg's Corn Flakes remain the same. The same 'live' flavor, the same bigger crisper flakes, the same sweet freshness that make Kellogg's Corn Flakes now—as ever—America's first love in cereals."

Back again also on the face of the carton—more prominently than ever—is the famous W. K. Kellogg signature, identified simply by the two words, "The Original," in place of the early guarantee, "None genuine without this signature."

The illustrative treatment for each package has its specific product sales appeal. The "snap, crackle, pop" of Rice Krispies is indicated by guide lines issuing from a pictured bowl of the cereal, but the pictures are made in a series to show the product served with strawberries, blueberries, peaches or bananas. Appetizing pic-



RADIO AND TV TIE-INS like these picturing Guy Madison as "Wild Bill Hickok" and Andy Devine show adaptability of design to timely themes.

tures of cereal with seasonal fruits also highlight the Krumbles, Bran Flakes and Corn Soya packages. The bargain feature of "three extra biscuits" in the Shredded Wheat package is emphasized on the front of the carton. The Sugar Corn Pops package features Guy Madison as "Wild Bill Hickok" and other stars in this current Kellogg radio and television show. There are series of packages, too, for Pep and All-Bran, showing photos of lively, healthy people, changed from time to time so the packages never become dull or static. Backs and sides of all the packages feature recipes, premiums and items with kid interest, also changeable.

Consumer tests of the Kellogg

packages were conducted in the New England area. Interviewers with tape recorders were stationed in some store locations, where they made special recordings of consumers' reactions. When a woman selected a Kellogg cereal from the shelf, she was asked if she would mind saying a few words into a mike telling why she liked the new packages. Said one Hartford, Conn., housewife, "It was like suddenly discovering that the freckle-faced girl next door had blossomed into a raving beauty."

Thousands of similar reactions put the new packaging program into quick motion. Sales tests checked against the control stores showed sales in-
(This article continued on page 186)

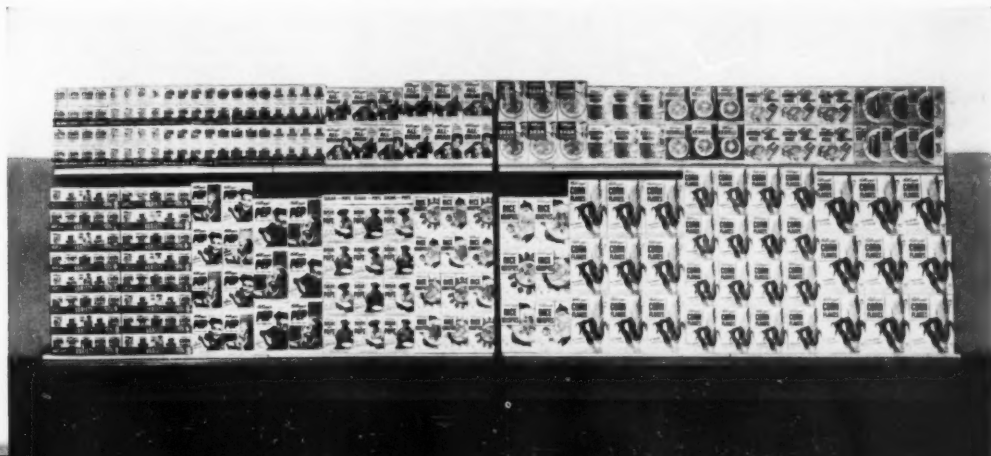


BARGAIN APPEAL of Shredded Wheat package is highlighted by showing "three extra biscuits."



DOUBLE TREAT of this product, combining bran flakes with raisins, is told by the illustration—but the logotype identifies them unmistakably as Kellogg's.

ON DISPLAY, they all say Kellogg's, but the variety is as exciting as magazines and comic books on a news stand.





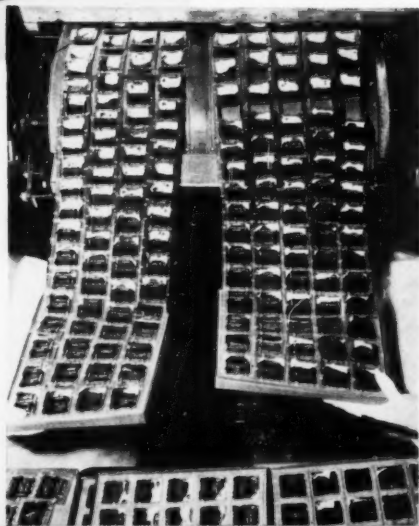
INDIVIDUALLY PACKAGED in its own calendered rigid vinyl container and protected with a heat-sealed transparent film cover, this measured portion of jelly is practical for restaurants, dining cars, institutions.

PHOTOS COURTESY KRAFT FOODS CO.



"YOURS ALONE" designation on the plastic film closure aptly describes the outstanding merit of this new package, which reportedly has won excellent consumer reception because of its sanitary freshness.

HIGH-SPEED output—200 to 300 containers a minute—is achieved with special machinery that forms, fills and seals containers in one continuous operation. Here, containers after filling and sealing under 200 deg. temperature are being fed from a cooling chamber into compartmented master cartons.



PORTION

Packaging is continually opening up new merchandising opportunities by pioneering new ways to serve or use familiar products. One of the most recent and at the same time promising packages offering new convenience and practicality is a single-service container, made of calendered vinyl plastic and fabricated automatically at high speed in the packager's plant just prior to filling. The closure is a plastic film heat sealed to the top edges of the container.

The Kraft Foods Co., anticipating wide opportunities, especially in institutional food trade, for this type of food packaging, which they call "portion control," has acquired use in the food field of packaging facilities and methods developed by Foodies, Inc.*

At present, Kraft's "portion-control" line of products consists of five items—four kinds of jams and jellies and cranberry sauce. In the near future, however, the line will probably be expanded and will offer a long list of individual servings of food, from appetizer through dessert. One of the foods prominently mentioned in this connection is processed cheese.

The jelly and jam single-service containers are filled with $\frac{1}{2}$ -oz. portions and are already in limited distribution. The cranberry sauce is packaged in a 1-oz. size.

The container itself has a square body and flanged edges at the top. Its shape suggests a miniature muffin pan with only one well. The well is approximately $1\frac{1}{2}$ by $1\frac{1}{2}$ by $\frac{1}{2}$ in. deep. The flanged edges extend approximately $\frac{1}{4}$ in. from the body. The vinyl material is semi-opaque with a water-white cast, thus giving the unit an attractive sanitary appearance.

The plastic film closure is transparent and is labeled in random design "Kraft Grape Jelly (or other product) Yours Alone." For reasons of present policy, Kraft does not disclose the type of cover film used, but it might be vinyl nitrile or saran.

The heat-sealed film overlaps the flanged top of the container and is easily peeled off, giving access to a packaged fresh product that has been

* Foodies, Inc., was the original developer of the package, on which patents are pending, and marketed it to a limited extent prior to Kraft's acquisition of the firm's methods and facilities.

CONTROL

THAT'S KRAFT'S NAME FOR A SIGNIFICANT NEW WAY OF

PACKAGING SINGLE SERVINGS OF JAM AND JELLY IN FORMED VINYL CONTAINERS

entirely sealed from human touch, dust and insects.

The intended convenience features of the "Yours Alone" vinyl containers are readily apparent. In restaurants, dining cars, air transit, etc., they provide a serving that wins a strong "plus" in consumer reaction because of the positive sanitary safeguard and the personal character of the container. Moreover, they are easy to store, serve and handle.

Institutional users already report substantial savings, it is claimed, as a result of reduced kitchen labor costs in preparing the individual servings. In addition, there is no waste of jellies and jams in filling individual containers and positive inventory control can be maintained. Unused servings that have been unsealed can be re-served. When empty, the trays are discarded. Dishes, of course, are not smeared with jelly when the vinyl containers are used and are easier to wash clean.

The special vinyl plastic used in fabricating the containers offers a number of packaging advantages. It is thin, light in weight, yet strong and protective. It is compounded to be compatible with all food products and entirely inert.

Kraft forms, fills and seals the containers on a custom-made machine

that involved several years of research and development. The first production machine was installed early this year to form, cut, fill, seal and deliver the individual, unit containers to a master carton at a reported speed of approximately 300 containers a minute—a packaging rate that is exceedingly fast for packages of this type. The filling and sealing, as a result of the specialized type of vinyl formulation employed, are done under a temperature of 200 deg. F., thus assuring sterile conditions for these critical phases of the packaging operation.

Kraft's initial packaging installation for producing portion-control packages was made in the Chicago plant, but several other of the company's large manufacturing plants across the country are scheduled to have such installations in the near future.

Closure of the package, it is reported, may be lightly or tightly sealed, depending on the perishability of the food to be packaged. Since the film extends beyond the flanged edges of the container, it can be easily grasped by the consumer to break the seal and remove the cover.

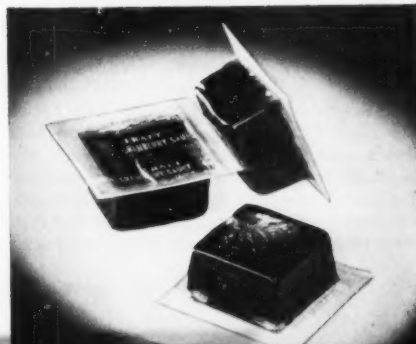
After sealing, the containers travel through a cooling chamber on a wide belt that has 10 grooved tracks. Each track carries a line of filled containers. The output from five of the tracks (This article continued on page 193)

SHIPPING CONTAINERS hold 200 single-service vinyl containers, packed 20 to a master-carton tray. The individual vinyl containers are light weight, strong and protective, but require care in handling to avoid crushing.



† See "A Look at the Vinyls," MODERN PACKAGING, Feb., 1952, p. 79.

ATTRACTIVENESS and novelty of the new containers pleases restaurant patrons. Semi-opaque body and transparent closure afford product visibility and brand identification.

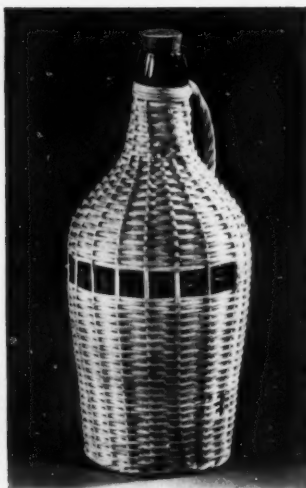


FOUR VARIETIES of jams and jellies are now included in the Kraft line, which eventually will probably include a long list of products put up in various sizes and shapes, for both the institutional and the retail trade. Special advantage to institutional users is the elimination of kitchen labor costs on on-premises filling.





1875 Oldest special bottle existing today is hand blown with seal-type label. Its irregular shoulder and base are typical of early American hand-blown bottles.



1880 Wicker-covered demijohn, one of most popular, was kept over 20 years. Openings reveal name molded in bottle.



1885 Sell copy was put on porcelain-topped stopper of this decanter. Name etched on face gives bottle a frosted look.

HARPERANA

I. W. HARPER'S PRESENT HANDSOME DECANTER PACKAGE IS THE DESCENDANT
OF A LONG LINE OF SPECIAL-DESIGN BOTTLE PROMOTIONS

When Schenley Industries first introduced its present popular gift decanter package of I. W. Harper whiskey in 1949 it was simply carrying on a tradition of that brand for special bottle promotions that dates back to 1875.

A captivating collection of the pre-Prohibition private-mold bottles—ranging in style, shape and material from wicker-covered demijohns and quaint ceramic jugs to elegant cut-glass decanters—has been assembled by Schenley as part of its "Harperana" memorabilia. While antique shops throughout sections of the country were checked by company representatives, most of the Harper special bottles were sent in by persons who

"inherited" them from the original owners or who discovered them in attics or while plowing or digging flower beds.

Because the collection demonstrates the twin objectives of special-design bottles—presentation of a container with intrinsic design interest and promotion of the brand name and quality—it is interesting to present-day packagers. For this reason as well as for their historical significance, some of the outstanding bottles in the collection are illustrated here.

The oldest special Harper bottle in existence is a hand-blown flask, slightly lop-shouldered, with a seal-shaped paper label. This bottle was in use in 1875, three years after the

whiskey was official'y named I. W. Harper by its original maker, the Bernheim Distilling Co. of Bourbon County, Ky. In the 1860s the bourbon was known simply as "Bernheim Whiskey," but in 1872 the Bernheim brothers decided to facilitate the merchandising of their product by giving it a name that would be remembered. The story goes that since their first star hustler's name was Harper and most of their buyers associated the whiskey with "the Harper man," the brothers chose to honor the salesman by using his name. The "I. W." initials, for Christian names now forgotten, were borrowed from one of the brothers. The brand's trademark—a gentleman in Victorian dress mak-



1890 Decorated pottery jugs came in two color combinations: tan and brown or gray and blue. Illustrations of medals won emphasize quality.



1890 Nautical theme on white ceramic bottle was a tribute to shippers who transported brand. Decorations were painted gold.



1895 Commemorative bottle for national G.A.R. encampment, one of the most valuable, is modeled after Civil War canteen.

ing a courtly bow, also called "the Harper man"—is another tribute to the salesman.

A rather subtle way of calling attention to the brand name—at the same time offering a convenient and protected package to the purchaser—is a wicker-enclosed quart-sized demijohn bottle, first made available around 1880. Square openings in one side of the covering were spaced to reveal the letters of the name which were molded in the bottle. The popularity of this package resulted in its issuance for nearly 20 years despite introduction of other Harper special bottles meantime.

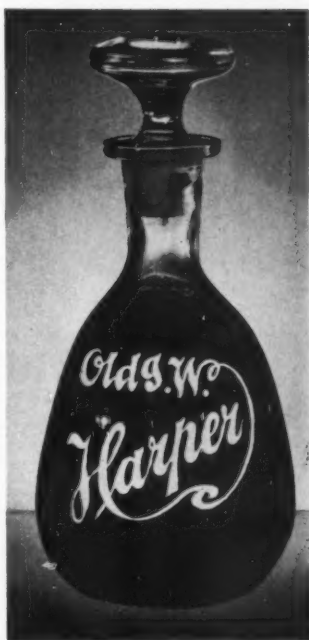
One of these, a special decanter bottle with a porcelain-topped cork stopper, introduced in 1885, marks a shift in emphasis toward the use of more advertising copy on the package. The copy on one side of this porcelain stopper reminded the user that "Bernheim whiskies are best," while the other side bore the legend, "Good old I. W. Harper—the whiskey your grandfather used."

The appeal of jugs and ceramic bottles is evidenced in two special designs issued around 1890. The jugs were available in two color schemes—tan with the decorative design and

lettering in brown and gray with blue. A square bottle, made of white ceramic with a crackle glaze, bore gold-colored anchor decorations and lettering. This was designed to stress the quality of the brand—which by that time had been awarded many medals for excellence—as well as the fact that the company depended upon the steamships to transport the ever-increasing quantities of I. W. Harper whiskey to domestic as well as to foreign ports.

A charming special bottle in the collection is one designed to commemorate the 29th national encampment of the Grand Army of the Republic in 1895. Molded in the shape of a canteen, the face of the bottle was lavishly decorated with scroll work and a reproduction of the medal awarded to G.A.R. veterans after the Civil War.

The fashions of the Gay '90s influenced the design of Harper's special bottles issued from 1900 to 1910. Symbolic, perhaps, of this era is a glass-stopped pinch bottle known as the "Dandy," which was offered in 1900 for the first time although the bottle itself was designed in the late '90s. The remarkable preservation of the name, believed to be hand let-



1900 Pinch-bottle "Dandy" decanter used a porcelain-type paint that still adheres to glass.



1910 Extra heavy cut glass has lettering deep etched with gold fill, ornate fluting.



1910 Companion decanter in traditional shape has a hollow glass stopper with an etched star design.



TODAY Present gift decanter is one of most successful current designs. Sold at no extra cost, it is generally available all year round.

tered using a porcelain-type paint and fired for permanency, is a notable feature of the bottle. This could be an early progenitor of today's applied ceramic labeling on glass.

Although similar in labeling methods used, two special bottles brought out for Harper in 1910 illustrate again the consideration given to appealing bottle design. Each bottle is made of clear, heavy, cut glass, deeply fluted at the necks. One is a long-neck, traditional decanter shape, while the other resembles more closely the customary outline of a whiskey bottle except that its decorative fluting continues over the shoulder section and reappears around the base. The only other decorative element is in the treatment of the double initials "BB" and the name inscription. The letters have been deep etched in the glass and filled in with gold ink. Both bottles were fitted with glass stoppers whose designs were in keeping with the style of each—a delicate, hollow core stopper with stars etched on the exterior for the decanter; a heavy, plain, polished stopper for the other one.

One of the rare public appearances of these irreplaceable bottles occurred in the fall of 1951, when the entire "Harperana" collection was sent under guard to Atlantic City, N.J., for exhibition at a national sales conference held by Schenley Distributors, Inc.

A fitting addition to the collection of its distinguished predecessors is the present Harper decanter mentioned at the beginning of this article which revitalized the design and promotion of special bottles. Recently this handsome package was selected as the only whiskey bottle to be included in a collection of 70 outstanding modern American packages that has been put on exhibition in Europe under the sponsorship of ECA.

I. W. Harper is reported to be the favorite brand of Louis S. Rosenstiel, chairman of the board of Schenley Industries, Inc., and it is at his insistence that the tradition of the gift decanter has been kept up. Said to be the first whiskey gift decanter in recent years nationally advertised and made available to consumers at no increase in price, the handsome package has helped keep I. W. Harper among the leaders in the field of quality bottled-in-bond bourbons. The decanter is generally available all year around.

Shopper-participation display

W. M. BARR'S CORRUGATED SHIPPER SELLS PAINT SPECIALTIES

BY LETTING CUSTOMER TRY THE PRODUCT AT THE POINT OF SALE

Good examples of the effective use of corrugated shippers for point-of-sale display are the new "Up Front Salesmaker" for Coppo—a copper naphthenate preservative—and a recent "Try-it-Yourself" merchandiser for paint remover originated by W. M. Barr & Co., Memphis, Tenn., to pull its line of wood cleaners and preservatives up front among paint-dealer specialties.

Translating the "audience-participation" idea into practical shopper-participation at the paint counter, this company came up with an unusual demonstration-type counter and window display-shipper that met with immediate success a few years ago for its Klean-Strip paint remover.

While this effective display carton has been discontinued temporarily because metal allocations have limited production of the 1-pt. cans packed in it, a description will show why its principle is so popular.

The Klean-Strip display-shipper, made of die-cut corrugated board, opened in such a way that the top panel folded back to form a back piece and the outer front wall, constructed with a full flap, doubled out to form a tilted, desk-like section. Die-cut openings in this front section provided holes for a can, paint brush, printed information inserts and, most

important, small painted sheets of material so that customers could actually try the paint remover in the store. The whole purpose of the display was summarized concisely in six words. Printed on the back riser below an attention-getting illustration of loosened paint being scraped away was the slogan, "Peels off paint," and as the eyes' natural focus shifted down, there was the invitation, "try it yourself," below the materials set in the extended front section.

The same kind of original thinking has been applied to the development of the W. M. Barr Co.'s new "Up Front Salesmaker" corrugated shipper.

A special opening device on the top is a feature of the Coppo shipper which contains six 1-gal. cans. Although both top flaps of the corrugated carton are securely sealed, the receiver is warned by a message printed on one flap, "Caution, do not open top, special display inside," while on the other flap, beside a bright red seal with a stout string disappearing under it, are the words, "To open, pull red string." By following these directions the opener finds that he has broken score lines on the front and side walls which permit half of the top to be lifted back, exposing the cans and a display-card insert.

The section thus released can be

folded back to make a second tier, the weight of two cans holding it in place. The display card, die cut to slip in place on this top tier, can then be added to form the back piece.

The design and color scheme of the complete unit is planned to complement and integrate each part. The carton has a solid green background printed on the side walls and brown lettering, harmonizing with the green and brown colors of the lithographed cans. The display card, silk screened in three colors, reverses the emphasis on green—this color was suggested as the dominant one, since the preservative itself has a greenish tint—by using dark brown for the background.

In approaching the problem of how to make point-of-purchase displays aid actively in merchandising these paint-store specialties, W. M. Barr & Co. has found it profitable to consider the function of a display from the viewpoint of the dealer as well as the consumer. The features incorporated in the design and construction of the Coppo and Klean-Strip display shipping cartons have increased dealer acceptance and use substantially, the company reports.

CREDITS: Display shippers, Gaylord Container Corp., 111 N. Fourth St., St. Louis, Mo. Lithographed cans, Continental Can Co., 100 E. 42nd St., New York.

DEMONSTRATION feature of corrugated shipper appeals to dealer and consumer. Front section holds painted sheets on which customer may brush remover to see how it works.



COUNTER OR FLOOR displays may be made with shipper, scored to open into two tiers. Back piece slips over top tier.





Carnation

EVAPORATED MILK

There was a time, within the lifetime of many of us, when a can of evaporated milk was about as salable as an electric fan at the North Pole. Yet today evaporated milk is the largest-selling single food commodity packaged in cans. Approximately 20% of all food cans are used as evaporated-milk containers. Evaporated milk is more frequently purchased than any other canned-food item in retail stores and is used by about two out of every three families. Total dollar volume for this important segment of the dairy industry for 1951 was more than \$403 millions. This represents a production of roughly

63½ million cases of evaporated milk, or approximately 3 billion, 46½ million cans.

Canned milk's high degree of acceptability for cooking, infant feeding, institutional and industrial uses today contrasts dramatically with the situation a little over 50 years ago. Then, grocers would not stock it, because housewives would not buy it. In the late 1890s the product was totally unreliable.

The problem faced by the few hardy pioneers of the industry was threefold.

First was the package. Tin cans were hand made; the slightest imper-

fection permitted the leakage of air which soured the milk.

The second problem was in the processing. Evaporation and sterilization processes were not consistent; viscosity and color of evaporated milk varied widely from batch to batch. More serious was the complaint that the butter-fat component of the milk often rose to the top, forming a thick, heavy substance.

The third problem was that of convincing the consuming public that evaporated milk was just pure, whole cow's milk, from which about 60% of the water had been removed—and nothing whatever added—and which was then canned and sterilized in the container to preserve its freshness. The popular notion was that it was a substitute for milk—but nothing was further from the truth.

Considerable success had been achieved by makers of "condensed" canned milk. This product also began as whole cow's milk. Part of the water was removed, but up to 50% of sugar, by volume, was added to preserve the milk concentrate when it was canned.

By association, evaporated milk was popularly referred to as "condensed" milk, but the difference was as night is to day. Obviously, the greater future lay in the unsweetened, evaporated product because of its wider variety of uses.

It was this potential that attracted Elbridge Amos Stuart to the Pacific Northwest, where he began production of Carnation brand evaporated milk in 1899.

For many years Carnation Evaporated Milk has been the largest-selling brand in the world, exceeding its nearest competitor, it is said, by a 25% margin. On the basis of these figures (supported by independent surveys), Carnation probably is the

CONTENTED COWS theme derives from Carnation Farms like this one near Seattle, which company maintains for improvement of breed and supply of highest-quality milk to its plants. Carnation Holstein-Friesian cows for years have been national champions. This well-publicized activity helped persuade public that canned milk is pure and wholesome.



NOMINATED FOR PACKAGING'S HALL OF FAME BRADSHAW

• It's the largest selling canned food item in the world, sold by 1 out of 3 families in the 100-billion evaporated-milk market.

• The average is estimated that a family's sign is today's label of product with goodness.

• The name and label have been generally pronounced to maintain a strong, clear, for business and life.

• The product is a good example for making a product a success story of one of the most prominent brands.

largest-selling single branded food item sold in cans in the world. Surveys also show that Carnation is used by approximately one out of every three evaporated-milk-using families and it has been found that on the average about one in every five customers who enter retail stores throughout the United States buy Carnation. Furthermore, the Carnation label is believed unique in this product field in that it has never been placed on a can of milk that was not produced in a Carnation plant.

These facts by themselves would qualify Carnation Evaporated Milk for nomination to *Packaging's Hall of Fame*. But many other features of the company and product—including leadership in technological developments in the evaporated-milk-processing field, and the highest ethics and principles in business, either as practiced or inspired by Carnation's founder—have importantly influenced the company's success.

Carnation's origin

Where most success stories begin with a young man making a name for himself, Elbridge Amos Stuart was 43 when he decided to go into the perilous evaporated-milk business. A serious personal illness, a dishonest employee and the forced sale of his interest in a wholesale business had ended his three earlier, but otherwise successful, attempts to enter the grocery field.

Early in 1899 Mr. Stuart ran into Thomas Yerxa, an acquaintance of some years before, who proposed a partnership in the manufacture of evaporated milk. All Mr. Yerxa wanted was a silent partnership—a fifty-fifty proposition, with Stuart drawing a salary as manager, Yerxa sharing in the profits. Mr. Yerxa al-



LATEST STEP in modernization of Carnation label was most drastic in 53-year history—but note how the bolder, simpler label at the right still retains all of the recognition elements of its 1947 predecessor.

ready had lined up a Swiss engineer who had learned the evaporating process in the Old Country. Furthermore, he knew where a condensed-milk plant could be obtained—at Kent, Wash.—for \$5,000.

The fact that the plant in Kent, a little town a few miles south of Seattle, housed the equipment of a

bankrupt, sweetened condensed-milk company was not encouraging. Yet Mr. Stuart knew that unsweetened evaporated milk, when properly processed, was unbeatable for cooking, as a beverage and for infant feeding. He knew well about the latter. It was evaporated milk from his El Paso store shelves that had cured his infant



ORIGINAL



1909



1925



1929

CHANGES in label design were almost imperceptible over the first half-century, although the package has always kept pace with changing times. Note that the product originally was marketed as sterilized cream.

son's dietary deficiency, where other measures had failed. He became interested in Yerxa's proposition.

Historically, the canning of milk had been tried as early as 1827 by William Underwood. It was Gail Borden, however, who invented the vacuum method of evaporating milk that is used today. Later, in 1884, a John Meyenberg began producing unsweetened evaporated milk in Highland, Ill., but had indifferent success, selling out and going back in business several times. In spite of his care and ingenuity, the canning processes were faulty, because the milk in a high percentage of cans, when opened, was sour. Nevertheless, it was Meyenberg

who had produced the milk that helped bring Stuart's infant son back to health. And John Meyenberg was the Swiss processor about whom Yerxa had spoken.

Evaporated milk's inherent characteristics also appealed to Stuart's merchandising sense. As city populations climbed at the turn of the century, the problem of supplying milk in metropolitan areas was becoming increasingly acute. Milk delivery often consisted of ladling the liquid into the customer's container from an open milk pail, hardly a sanitary process. Refrigeration was expensive and not reliable. Transporting whole milk meant transporting 87 lbs. of water for every 100 lbs. of milk.

Evaporated milk, on the other hand, was never touched by human hands. It came in contact only with sterilized equipment. It would even keep for long periods opened and without refrigeration. By adding an equal amount of water, it could be reconstituted to its original form for infant feeding or any other milk use. Above all, when properly processed, it was absolutely safe because it was sterilized in the sealed can.

So, late in 1899, the Pacific Coast Condensed Milk Co. was formed. Aside from the financial contribution of the two partners, the firm's assets consisted of a broken-down condenser housed in a former hotel building, Stuart's business ability and Meyenberg's processing know-how.

The machinery in the Kent plant was remodeled or replaced so that evaporated milk could be produced and on Sept. 6, 1899, the first 55 cases of 48 cans each were processed

from about 6,000 lbs. of milk brought in by dairy farmers in the neighborhood. Twenty months later Yerxa sold out his interest and Mr. Stuart became the sole owner.

Package evolution

Can-making machinery then was controlled by a Chicago firm, Norton Bros. For the first year and a half, the Pacific Coast Condensed Milk Co. made its cans by hand. A half-dozen "plumbers," armed with tin snips and soldering irons, produced a 16-oz. can made of four components: a body, two ends and a small circular cap which later was soldered over a 3/8-in. hole in one end. Can bodies were clamped to a mandrel and soldered where the edges lapped. Flanges were formed on the tops and bottoms, then assembled to the body and soldered.

With no equipment to test cans for leaks, the practice was to store filled and sealed cans, unlabeled, in a heat room for 30 days, turning them twice. By the time they were ready to be labeled, about 12% of the cans had swelled, indicating leaks. Labeling also was done by hand.

While the various production lots underwent their heat-room test, Mr. Stuart searched for a brand name. A cigar smoker, Stuart one day noticed a display of Carnation cigars in a store window. The picture of the carnation, he thought was very attractive and a better name for a milk than for a cigar. His attorney found that Carnation, as a brand name for milk, was available. Thus the Carnation brand of evaporated milk came into being.

The original Carnation 16-oz. can was an innovation. At that time all other brands were put up in 12-oz. cans, called "family size." Mr. Stuart was the first canner to recognize that the "family size" was too small; that the 16-oz. can to sell at the popular price of 10 cents would have greater acceptance. Subsequently, all other manufacturers adopted the larger can, calling it the "family size." The smaller became an "emergency ration."

Filling cans, however, remained a slow, laborious job. This problem was solved when a Carnation foreman devised a model machine which filled six cans at a time. It consisted of six metal cups each holding 16 oz. of milk, with an automatic cut-off which stopped the flow. A tray of empty cans was rolled under the filler and a

QUALITY CONTROL to maintain Carnation reputation is continuously carried on during processing. This is viscosity test.



lever released which opened valves permitting the milk to flow into the cans. Spouts fitted the filling holes exactly and there was no waste. Once the principle was proved, a 24-cup filler was devised, the type generally in use throughout the industry until 1913, when the now widely used Dickerson continuous filler was developed.

For about a year and a half, the unsatisfactory hand-made cans were all the company had. The American Tinplate Co. then bought out Norton Bros. and can-making machinery was obtained and set up at the Kent plant.

The company made its own can-head dies. These formed a series of concentric rings and the edge flange. The rings served the double purpose of strengthening the end and providing tension when it was fitted to the body. The flange was slightly belled out so that solder would flow between it and the body, forming a perfect seal.

The Carnation can remained virtually unchanged from then on. Additional can factories were put up as the demand increased. Today, with eight can factories for its own use, Carnation is the third largest manufacturer of cans in the United States.

The famous label

Red and white were chosen for the dominant Carnation label colors because they represented the flower in its purest state. The third color was green. Another factor in the original label design was Mr. Stuart's early recognition that eye appeal and display value of Carnation milk would be enhanced by a bright, attractive package. His previous grocery experience had convinced him that shoppers, even in pre-supermarket days, bought selectively where brand identification was prominent.

The upper half of the label was a red band containing the script logo-type "Carnation" and general statements about the product in white. Underneath the logotype was a horizontal oval panel bearing a line drawing of two carnations. Below this, in the white band, were the words "Sterilized Cream," in green. Use suggestions, a guarantee and the manufacturer's name were arranged on either side. A torch on each side of the flower illustration and a row of fleur-de-lis at the top and bottom of the label completed the decor.

Very shortly a new label was de-

veloped which carried three carnations—two red and one white shaded in pink—in place of the original oval panel. Otherwise, elements and copy remained the same. Except for subtle modernization of typography and design elements from time to time, the label face has remained recognizably the same for nearly half a century.

Reference to evaporated milk as "sterilized cream" was common in the industry until 1906, when the Federal Pure Food Law was enacted. Dr. Harvey W. Wiley, apostle of the law, established an 18% minimum butter-fat content for cream. Since it was impossible to evaporate milk with a fat content that high, the name was changed to Carnation Evaporated Milk, although the product remained exactly the same. Then a new rule was laid down, which in effect specified a fat content of 9 to 10% for evaporated milk. The Carnation product had been standardized at 7.8%. Mr. Stuart knew from experience it was impossible to sterilize a 9 to 10% butter-fat fluid and preserve its smooth, creamy texture.

While his competitors attempted to comply with the statute, Stuart carried the fight to the Secretary of Agriculture. He demanded to be shown how it could be done. The Secretary sent an assistant to the Pacific Coast where a laboratory was set up and after 10 months the assistant failed to produce an acceptable product.

In 1907 a committee of three evaporated-milk manufacturers, headed by Stuart, went to Washington and convinced the Department of Agriculture that 7.8% was the proper butter-fat content for this product. This held until August, 1941, when the minimum was changed to 7.9%.

New labels, identifying the contents

as "Sterilized Evaporated Milk," appeared in 1907. The major change was in the illustration of the three carnations, which now appeared more lifelike. Copy remained the same except for the statement of guarantee under the Food and Drug Act of 1906 and the naming of the five plants then operating. In 1927 the slogan "From Contented Cows," which had been for years identified with Carnation advertising, first appeared on the label.

A major change in can size, from 16 to 14½ oz., took place in 1930 in order to maintain the popular 10-cent price. This made possible a three-for-a-quarter "special sale" price, also popular in those days. The move to



PROMOTIONAL SELLING uses the most modern supermarket methods, including mass display and suggested tie-in products.

EARLY promotion gimmicks, built around the trademark and the "from contented cows" theme, include celluloid book mark of 1905, pin tray of about 1912, automatic pencil of 1916.



the smaller can size was industry wide.

At the same time the label was changed to a double-panel type and copy was rewritten. The fleur-de-lis and torches were eliminated in line with the modern trend to simplicity. This label continued until 1947, when the present label was adopted.

On this new label, the basic elements were re-arranged and simplified for greater eye appeal. The old-style script "Carnation" was replaced by a distinctive Roman logotype. All other print was changed to sans serif. Product information was arranged on the back panel under a full-size repeat logotype. The cluster of three carnations appeared on the front panel only.

The 1930 and 1947 Carnation redesigns are classic examples of modernization without loss of recognition. Probably few consumers were aware of the changes—but they have always known that Carnation milk looked the part of a quality product.

Sales and promotion

Selling his Carnation Evaporated Milk in the early days, Mr. Stuart found out, was more difficult than producing it satisfactorily. From the start, his policy was to obtain 65% distribution in one market before moving on to the next. Jobbers usually bought fewer than 10 cases at a time. Stuart also contacted grocers direct, purposely selling only six or eight cans at

a time, which he carried with him in a basket. Small orders meant the milk would not stay on the shelves for long. A former grocer himself, Mr. Stuart knew grocers did not like to tie up their money in inventories. He established a policy, which continues today, of never over-stocking his dealers.

The Alaskan Gold Rush early in the century not only provided the first real market for Carnation, but produced a stamp of approval for the product. Gold prospectors found that Carnation remained fresh after the roughest kind of treatment and after repeated freezing and thawing.

They also found that after continued jostling the butter-fat rising to the top of milk became churned into small bits of golden butter. This may have been a luxury in Alaska, but at home it was one of the chief complaints against evaporated milk. Mr. Stuart solved this problem in 1905 by importing from France the first Gaulin homogenizer to appear in this country. Butter-fat in milk run through the homogenizer under pressure was made into an "emulsion"; that is, the butter-fat globules were held in suspension in the milk. This prevented milk from separating so objectionably.

Mr. Stuart used these facts in newspaper ads directed to miners and prospectors. On the strength of re-orders from dealers and jobbers in Alaska, sales in Washington and Oregon began to move up.

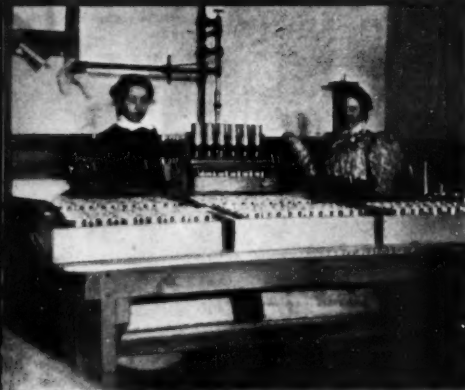
In each new territory, Stuart made personal calls on jobbers and grocers until he got his 65% distribution, then started an advertising campaign in local newspapers to build up the volume. The campaign would then be switched to painted walls and bulletins, posters and car cards, supplemented by newspaper ads in the larger cities. Demand soon outstripped the capacity of the original plant and others were put up in the Pacific Northwest.

Sales tours in the South and Midwest, accompanied by vigorous advertising, continued to generate new business.

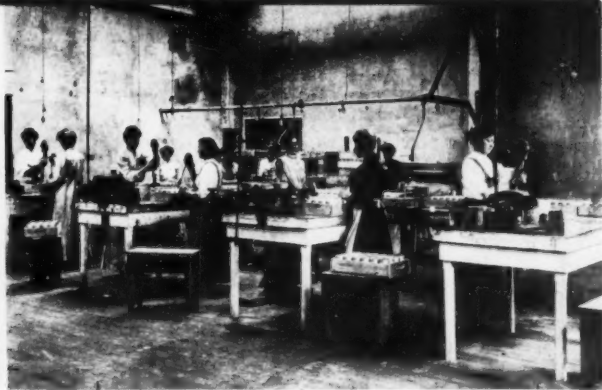
In 1906 the company's initial national advertising campaign was launched through the John Lee Mahin agency in Chicago. During one of the meetings, Mr. Stuart described the lush pastures, pure mountain waters and juicy grasses of the Pacific Northwest dairy country and how the cows rested serenely in the cool shade of luxuriant trees. After listening, Helen Mar, a young copywriter assigned to the account, exclaimed: "Ah! The milk of contented cows." Her remark inspired the Carnation slogan, "From Contented Cows," which soon became one of the best-known trade slogans in the country.

The Carnation dairy farm was established by Mr. Stuart in 1909 near the town of Carnation, about 35 miles from Seattle. Here he began

In the pioneer days

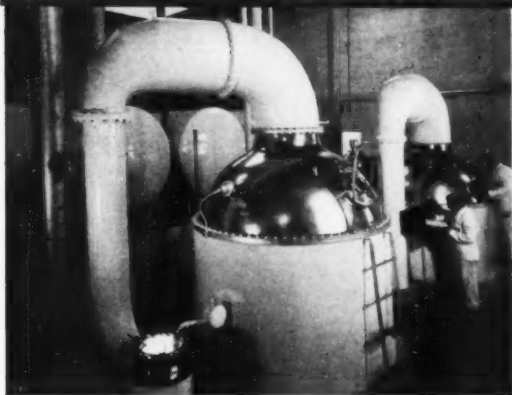


FIRST FILLER, developed by Carnation, filled six cans at once. This type was standard in evaporated-milk industry until 1913.



HAND SEALING was the only method available in the early days. Girls soldered a small circular cap over the filling hole in the top of the can. The Carnation 16-oz. can was an innovation—replacing the 12-oz. size.

Modern production methods



VACUUM PANS in which about 60% of the water is extracted from fresh whole milk under vacuum to prevent scorching.



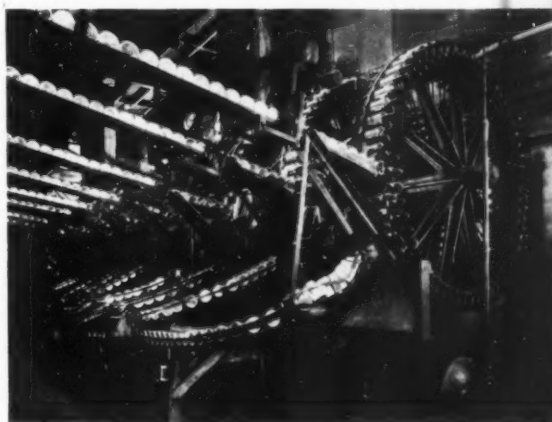
ROTARY FILLERS, among largest used in packaging, measure milk into can, solder opening, check for leaks.

breeding pure-bred Holstein cows that later set world production records. The publicity attendant on this activity; the rich, beautiful country and the well-equipped sanitary dairy buildings set the stage for the "high-quality" theme for Carnation milk, which has since become the basis for the company's advertising and promotion and the slogan "From Contented Cows." Our cover illustration is suggestive of the type of illustration that for many years accompanied this slogan in Carnation advertising and promotion.

During the next few years, distribution spread to the East Coast. Because freight rates from Carnation's Western plants made it impossible to compete with local brands, three plants were established in Wisconsin and one, in 1911, in Illinois.

Following the company's first sales convention in 1913, promotion and advertising hit a new high. Outdoor advertising was launched in 42 cities, together with full-page newspaper ads; full pages and columns, some in color, in 11 general consumer and women's service magazines, and a supplementary campaign in 10 recreation and outdoor magazines. Copy was mainly educational and each ad featured a particular milk use for school children or babies, or for cooking. Copy emphasized a guarantee which read, in part: "Order a 10-cent can of Carnation Milk from your grocer and if you find that Carnation Milk does

PRESSURE testing of empty cans prior to filling has solved early problem of faulty containers. Finished empty cans enter pressure wheel from upper line, are subjected to high internal air pressure as wheel revolves and automatically ejected if they leak.



not please you better in every way than fresh, raw milk or any other evaporated milk or condensed milk, write us and we will cheerfully refund your money and postage."

Recipe books were offered to combat the tendency to put canned milk into the emergency-sale category. Cut-outs, window displays and other point-of-sale aids were offered grocers.

The year 1916 saw continuation of these advertising and sales programs with the addition of a wider variety of posters and a series of recipe folders in several foreign languages as well as English.

As distribution was effected in

major markets throughout the nation following World War I, Carnation's national advertising dwelled more on "what you can do with it" than "why you should try it."

Radio was tried first in 1931 on the Pacific Coast when the "Contented Hour" program was started. This new medium proved so successful that a revamped "Contented Hour" series was started coast-to-coast the next year and continued weekly for 20 years, until the end of 1951. Carnation's pioneering in radio gave it the distinction of being the first milk company to use the medium on a nationwide scale. The company chalked up



CARNATION FAMILY today includes all these products. Fresh dairy products are sold mainly on the Pacific Coast. Albers cereal products were purchased in 1929; corn flakes sales doubled under Carnation name.

another first in television for the evaporated-milk industry by sponsoring the nationwide Burns and Allen show late in 1950.

A considerable portion of Carnation's evaporated-milk distribution is the result of an aggressive display policy. Carnation salesmen are thoroughly indoctrinated in the "display, position, pricing" method of merchandising the product. Since more and more grocery stores are today converting to self-service operation, sales are influenced to a greater extent by the customer's exposure to a particular product.

Carnation takes advantage of this, making the most of the sight-and-price impact features of a prominent, attractive, well-priced display.

The high traffic potential of the Carnation brand name has encouraged grocers everywhere to tie in Carnation displays with other related products. For example they sell macaroni and cheese together with Carnation; or coffee and Carnation. From the grocers' standpoint, the result is increased volume both in Carnation and the tie-in items, the customer benefits by the basic economy and convenience of the milk, and Carnation builds sales volume. This is indeed a far cry from

Carnation's early days, when six to 10 cans on a grocer's shelf was a day's work for Mr. Stuart.

Production

Carnation always has made a point of its "controlled quality," and for good reason. Its strict, self-imposed quality standards require that every can of Carnation produced in the company's 35 evaporating plants must meet a very strict standard. To see that this standard is met is the job of the eight to 30 quality-control technicians in the laboratories at the plants, whose control reports and samples are again checked by a central laboratory staff at Oconomowoc, Wis.

Carnation quality, however, actually begins on the 45,000-odd farms of dairymen from whom Carnation buys its milk. These farmers follow set procedures for milking, cleaning utensils, preparing milk for delivery to plants. Carnation Farm Service Department representatives at each plant are available for consultation and advice on all aspects of dairy farming, soil conservation, crop rotation, feeds—even to construction and care of dairy buildings and equipment.

Milk meeting Carnation's produc-

tion requirements is again tested at the evaporating plant, graded and paid for according to butter-fat and solids content. Milk is then run through a vacuum pan operating at 26 in. of vacuum and heated to 135-155 deg. F., causing about 60% of the water to be drawn off as steam. The milk actually is boiling, but the vacuum lowers the boiling temperature below the scorching point. An average Carnation "pan" will remove 11,030 lbs. of water from 20,000 lbs. of fluid milk. The concentrate then is run through a homogenizer which forces the milk through extremely small apertures at a pressure of about 3,000 lbs. per sq. in., which breaks up the normal butter-fat globules into smaller ones from 1 to 2 microns in diameter. This disperses butter-fat evenly throughout the concentrate, preventing the rising of "cream."

The evaporated milk then is standardized to the legal butter-fat and solids requirements, vitamin D concentrate is added and the milk is ready to be canned.

This operation and the balance of the processing is continuous. Milk is pumped from the standardization tanks to the filler. Here empty cans are brought into a circular line under the filling cups. A series of precisely timed valves fills each can as it is carried through the circular line. After a can is filled, it is hermetically sealed by closing the filling hole with a small drop of solder. Sealed cans continue over a special Carnation-developed electronic device which automatically rejects cans that have been improperly filled.

Cans then are conveyed through a continuous sterilizer and subjected to a steam-pressurized temperature. The exact amount of heat and length of time is a closely guarded Carnation secret. After rapid cooling, the canned milk travels to the labeling and casing machines and is ready for shipment.

Associated products

In 1926 the Carnation Co. entered the fluid-milk and ice-cream business in Seattle, Wash. Within a few years this "fresh milk" division had expanded to the principal cities of the Pacific Coast states and has since gone into Texas, Iowa, Arizona and Oklahoma.

The move literally put Carnation in competition with itself, because Carnation Evaporated Milk has always (This article continued on page 176)



DESIGN of special waxed one-piece carton makes the setting-up by hand quick and easy. Cellophane for carton, which is also applied and heat sealed by hand, is beautifully printed in full color.

Small packager

RESTAURANT'S MARKETING OF FROZEN SPECIALTY IS AN EFFICIENTLY HANDLED, COMPLETELY MANUAL JOB

For the packager of a specialty item whose production volume does not initially warrant the cost of automatic packaging equipment, the big problem is how to organize a packaging procedure that is flexible and efficient within his budget. This was the situation Harold Reder, owner of The 1896 House restaurant, in Williamstown, Mass., faced when he decided to market the famous specialty of the house, Turkey Villeroy, precooked and quick frozen.

In choosing the packaging materials, the first consideration was to find a frozen-food carton constructed so that it would be easy to set up, fill and close by hand. The problem was complicated by the fact that an extra portion of sauce for the dish was to

be included along with the turkey.

An economical style of carton, often used by retail bakeries, was found satisfactory from the standpoint of ease in handling and it was therefore ordered and made up using special waxed, 0.020-in. white lined solid manila board. From flat blanks, a one-piece, tuck-top carton with four corner locks and full tuck and dust flaps, measuring 5½ by 5½ by 2¼ in., is set up by hand quickly. The tuck panel locks to the front panel in closing by means of a Hibson lock.

Before selecting the type of overwrap for the carton, Mr. Reder studied wraps of quality frozen-food products from the appearance standpoint and decided, after receiving esti-

mates, that his budget would permit the use of a cellophane wrap printed in four colors if he could keep art charges for the design under control. Being a skillful amateur photographer, he surmounted part of this cost obstacle by taking his own color photographs of a place setting with a ready-to-eat serving of the Turkey Villeroy. These color transparencies served as the basic artwork for an attractive wrap design printed in blue, white, red and yellow.

Keeping in mind that materials were only part of his packaging costs and that even with non-competitive specialty food items there is a limit to the amount of packaging expense which can be reflected in the selling price, Mr. Reder planned his packaging-line organization to use labor as efficiently as possible. A straight-line operation has been evolved using six girls. Two fill and close the cartons and four, working in two teams, handle the wrapping and carton set-up. With this staff, production has averaged 750 cartons per day.

Each carton is hand filled with four slices of cooked turkey which have been dipped in a special cream sauce, breaded and fried in deep fat, plus a 6-oz. cube of frozen sauce. The carton is then closed by the packer and passed to the girl who folds the printed cellophane wrap around it. The second girl in the wrapping team seals the bottom and two side seams, using an ordinary household electric iron. After the finished packages have passed through the quick-freezing equipment, they are packed 12 to a shipping carton.

A breakdown of costs for this complete hand operation shows that packaging materials and supplies average 4.2 cents per package (1.5 cents for the overwrap and 2.7 cents per carton) and labor costs 6 cents, of which 3 cents is for the wrapping (This article continued on page 188)

FILLING LINE consists of four girls, who successively insert four pieces of cooked turkey, then insert a frozen cube of Villeroy sauce, close and lock carton.



WRAPPING AND SEALING is done by a two-girl team, using pre-cut printed cellophane and an ordinary household electric iron. The output is 750 packages per day.

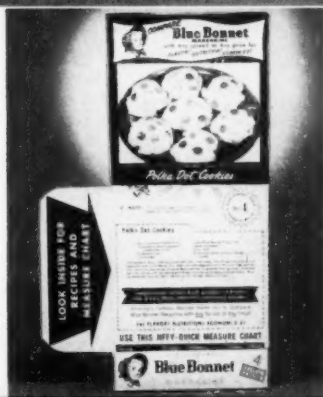




Blue Bonnet's recipe packages

New recipe packages for Standard Brands' Blue Bonnet colored oleomargarine carry on the back panel appetite-appealing, full-color pictures of delicious-looking dishes that can be made with margarine. Inside the packages, on the reverse side of each picture, is a tested recipe for making the dish. Since research showed that many housewives keep recipes in a kitchen file box, the illustrations and recipes are designed for easy clipping to fit into a standard-size recipe file. The smiling, blonde "Blue Bonnet Sue" trademark remains unchanged on the front panel of the Eastern flat carton. The first four dishes depicted on the cartons are fudge, French toast, polka-dot cookies, and potatoes and vegetables. A continuing series of new recipes and photographs is being planned. A mixture of all four of the current series is included in each shipping case for effective display.

CREDITS: Cartons, Sutherland Paper Co., Kalamazoo, Mich. Consultant on color and type arrangement, Quantacolor Co., New York.



Mix-your-own face powder palette of acetate sheet



Transparent and opaque acetate are combined in the Peri Powder Palette—a container shaped like an artist's palette holding six different shades of face powder and including a blending box, measuring scoops and an empty compartment for storing powder which the customer blends for her own use. Each of the six different shades of powder is in its own clear sift-proof acetate container, with a tight-fitting lid that is said to retain the freshness and fragrance of the powder. This method of ready-packaged flexible color harmony enables the user to blend powder without the usual muss and fuss that powder mixing usually entails. The palette is formed from 0.020-in. white extruded acetate sheet; the transparent covers for the sections are formed from 0.010 and 0.015-in. clear extruded acetate sheet. Literature packed with the powder palette provides suggested blending formulas.

CREDITS: Palette container molded by Conrad-Parker, Inc., Los Angeles, using Kodapak acetate sheet supplied by Eastman Kodak Co., Rochester, N. Y.

HISTORIES

Introducing paper crab shells

Packaging for mass distribution of an article that is new and unfamiliar always presents the difficult problem of how to tell the prospective customer at a glance what the product is and how to use it. Loroco Industries, makers of these paper crab shells, overcame both questions with an appropriately designed window carton for the product from restaurant use to general retail distribution through supermarkets, groceries, etc. One dozen of the paper crab shells are packaged to the carton. The acetate-covered front window gives a full view of the shells, while the back panel carries a full-sized reproduction of the product. The paper shells are cleverly secured behind the window by means of a scored and slotted paperboard insert which holds them rigidly in position. The carton itself is printed with a full-color undersea scene that sets the stage for a seafood product.

CREDIT: Carton, Dayton Folding Box Co., Harrison, Ohio.



New solution for gift-ribbon merchandising

The Facile Corp., makers of gift-tying ribbons, brought out this new multi-purpose counter shipper to meet the need for an inexpensive, disposable unit that will properly protect the ribbons right up to time of purchase. The display takes 50% less counter space to show the ribbons, incorporates a self-service feature, offers complete accessibility to all merchandise, provides all-over dustproof protection and requires no setting up by the retailer. The base is of set-up box construction; the interior is of chipboard. Stapled to the front piece is a sheet of acetate that rests over the ribbons to protect them from dust. The ribbons fit into four compartments, the backs of which are slotted to conform with slots in the two dividers. The ribbons stand loosely without getting crushed and the dividers prevent the ribbons from falling to the sides when some of the put-ups are removed. A scored sheet of chipboard is placed over the display which is fitted with a chipboard cover.

CREDIT: Display box, The Warner Bros. Co., Bridgeport, Conn.





1

Do package shapes



2



3



4



9



14



5



6



7



8



10



11



12



13



19



15



16



17



18



20



21



22



23



24



25

UNLABELED perfume packages of 25 leading brands which the readers of Woman's Home Companion were asked to name. How many of them can you identify? The answers are given on Page 190. PHOTO COURTESY WOMAN'S HOME COMPANION.

have recognition value?

56.7% OF THE 12,567 CONTESTANTS IN WOMAN'S HOME COMPANION QUIZ

CORRECTLY IDENTIFIED THESE 25 UNLABELED BOTTLES FOR PERFUMES

The individuality of container shapes in establishing the identity of a package has always been an important question, especially to users of glass packaging. Some very interesting data on this subject have been brought to light through a *Woman's Home Companion* project.

In its November, 1951, issue, the *Companion* ran an editorial quiz called "Be Perfume Wise and Win a Prize" in cooperation with the promotional activities of the Fragrance Foundation to make women more perfume conscious.

Readers who sought the prizes were asked to identify 25 unlabeled perfume packages shown in a full-color illustration and to submit their answers with a 100-word statement on why they liked to wear perfume. (So that our readers may test their own recall abilities, the same illustration is reproduced—without color—on the opposite page.)

The response to the quiz indicated that women—and quite a few men, too—not only know perfume brand names, but recognize the package by its shape alone. At the close of the contest, 12,567 answers were tabulated and more than 56.7% of them were completely correct. This high percentage of accuracy, of course, may have been influenced somewhat by the rules of the game which made no prohibitions against looking through magazines for perfume advertisements or checking perfume counters and displays in stores, as some of the ladies candidly admitted doing. Nevertheless, an analysis of the identification results is particularly interesting because it points up how strongly the packages were associated with brand names and the maker.

All 25 of the unidentified packages were those for leading perfume

brands. In the percentage of correct identifications, two tied for "first" place at 99.3%: the distinctive crown-shape bottle used by Prince Matchabelli for Beloved perfume and Bourjois' famous midnight blue bottle of Evening in Paris.

The applied color decoration on Shulton's Early American Old Spice bottle, a characteristic feature of the package, undoubtedly helped to account for its quick identification, making it place second on the list.

While the distinctive shapes of the private-mold bottles enabled readers to differentiate many packages, it seemed obvious from the ranking of the first 10 most readily identified that closures, too, provided excellent clues as well as the bottles themselves. The stoppers of Lenthéric's Tweed and Chanel No. 5, for example, are so different that they serve as landmarks even though the general outline of both bottles could lead to confusion in an unidentified illustration.

An impressive fact was that 16 out of the 25 packages scored 90% or better, including one fragrance just introduced last year. The complete breakdown on the percentages of correct identification is as follows:

Beloved, Prince Matchabelli	99.3%
Evening in Paris, Bourjois	99.3%
Early American Old Spice, Shulton	98.6%
Chantilly, Houbigant	98.1%
Bond Street, Yardley	97.7%
Tweed, Lenthéric	97.3%
Intoxication, D'Orsay	96.7%
Toujours Toi, Corday	96.5%
Shalimar, Guerlain	96.0%
Chanel No. 5, Chanel	94.9%
Shocking, Schiaparelli	94.9%
Emir, Dana	94.5%
Arpege, Lanvin	93.6%
Meteor, Coty	91.9%
Indiscrete, Lucien Lelong	91.4%
New Horizons, Ciro	90.9%
White Shoulders, Evyan	89.6%

Charme Rose, Tussy	85.7%
Woodhue, Fabergé	85.7%
Fleurs De Rocaille, Caron	85.5%
Command Performance, Helena Rubinstein	83.5%
Gemey, Richard Hudnut	81.9%
My Love, Elizabeth Arden	79.1%
To A Wild Rose, Avon	78.4%
Magic Hour, Dorothy Gray	73.8%

The contest brought forth a number of intimate details about the contestants. Of those who volunteered their ages, the youngest was a little girl of five and the oldest a grandmother of 88. Entries came from more than 20 countries and the contestants' occupations were as diversified as their locations. Answers were received from an operator of a livestock farm, a Marine Corps sergeant, a daughter of a diplomat, an airline stewardess, a tobacco factory worker, a woman who had been in an iron lung for five years, a minister's wife, a sanitation supervisor, as well as thousands of housewives and business women.

Among the comments in the letters answering the quiz, readers expressed opinions not only on why they liked perfume, but also about the packaging. One woman, for example, wrote: "Now that perfume manufacturers are packaging our favorite perfumes in a price range to fit every woman's purse, I am sure that perfume should be a major item in each woman's wardrobe."

Prize winners were announced in the March issue of the *Companion*. Information obtained through the quiz was made available to cosmetics buyers in more than 250 leading department stores and to members of the Fragrance Foundation for use in tie-in promotions.

Although glass packages for perfume and toiletries lend themselves (This article continued on page 109)



VARIATIONS permit La France to sell a single 2-oz. size; banded, glued, "piggy-back" deals, or a large economy size.

Versatile deal

LA FRANCE BUILDS UP TO INTRODUCTION OF NEW ECONOMY SIZE

WITH PACKAGE DESIGN PROGRAM THAT HAS WIDE MERCHANDISING FLEXIBILITY

The constant attention that must be given to package units and designs to meet new trends in consumer buying habits and merchandising practices is well exemplified by a packaging program for La France bluing, a product of General Foods Corp.

For years bluing bead form and flakes have been sold in small cartons of about 2-oz. capacity. With the increasing use of automatic washers in the home, however, women have begun buying bluing in larger quantities.

The course of La France packaging

during the last three years is an interesting example of planning toward these larger unit sales, with the eventual introduction of a large economy size.

First step in this program began with a new package design in 1949 to point up the improved La France formula in bead form. Two red bull-eyes on the familiar blue and white package were imprinted to read: "Saves Separate Washing Job" and "New bead form—dissolves instantly." Back-panel directions were improved and side panels were used to promote

the advantages of La France for laundering nylon.

This redesigned package, however, was the same size as previous ones. To encourage larger unit sales, La France, along with others in the field, began offering at various times three- and four-package deals by which the consumer received a "bonus" package for 1 cent.

These deals, of course, had to be packaged as a unit. La France accomplished this by two methods. One involved the use of a specially designed and printed yellow band reading

"1-cent sale; one package for 1 cent—3 at regular price." Four of the small boxes could be firmly banded together by this means on equipment in the company's plant.

Later, however, it was decided that economies could be effected in the packaging of the deals by using special cartons with a front panel designed for the 1-cent sale. By putting glue on the faces of three regular packages and by placing the fourth in front as the front "display" package, the company has been able to produce a sturdy four-package deal without the need for use of the separate band.

Both methods may be used, however, depending upon packaging equipment available in the plant and the time element in meeting the deal schedule.

La France's success with the deal packages clearly indicated that there is a place for a larger-sized bluing package today. A new economy size has thus been launched with many added selling features incorporated in the design of the new package—possible because of the larger surface of the bigger carton.

The basic design is the same, with the familiar logotype adjusted to the proportions of the front panel, but with prominent display of the words, "New Economy Size," at the top. The upper bull's-eye states, "Instant Dis-

solving Beads," while the lower, larger-sized one emphasizes the uses of the product: "Blues, whiteners, brightens, saves soap."

Further selling copy has been added in the form of balloon drawings of three women across the bottom with the following copy: "Gentle, can't hurt hands—fabrics; blues as you wash—no extra rubbing; never a streak or a spot." Above the picture strip is more sell copy: "Makes all soaps and detergents work better." All elements have been skillfully arranged for proper emphasis without being cluttered.

The back panel of the package is also livened up with an appropriate illustration.

The large economy size which is now a regular sales package was first introduced through a deal. This involved one more step in the design program. It was planned to have one of the small packages ride "piggy back" on the large one as a "1-cent sale" inducement, but the vertical arrangement of the specially designed 1-cent sale package for the glued four-package deal was not suitable for this purpose. A new 1-cent sale package with the design specially printed horizontally for riding piggy back on the economy size was thus produced. This, of course, meant another re-arrangement of basic elements and the words, "New Economy Size at Regu-

lar Price," substituted for "3 at regular price."

This over-all program has the advantage, the company reports, of versatility to meet a number of the merchandising requirements and La France expects to use all of these package arrangements as it finds they are needed.

CREDIT: Design, Gerald Stahl, New York.



FOUR small boxes are sold as a deal by putting glue on the faces of three regular packages, placing fourth display pack in front.

REGULAR PACKAGES
—modernized small package emphasizes advantages of bluing in improved bead form. Front and back of new economy size show use of illustrative treatment and skillful arrangement of many elements.



pretty soft—
for textiles!

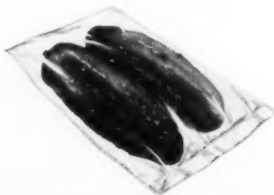


COULD YOU USE THESE PLIOFILM ADVANTAGES?



IT'S STRONG!

Pilgrim produce bags hold up to 10 pounds without danger of breakage.



IT'S LIQUIDPROOF!

Pilgrim is so moisture-tight, leakageproof, it safely seals pickles, sauerkraut, in their own flavor-making brine.



IT KEEPS MOISTURE OUT!

Crackers, tablets and other hygroscopic products stay crisp and dry in Pilgrim.

MODERN PACKAGING



There's nothing like soft packaging for selling soft goods.

That's why fabric-soft PLIOFILM is the ideal wrap for sheets, pillowcases, towels and other textiles.

PLIOFILM is so transparent it provides complete and flattering visibility. So tough it affords almost perfect protection against soilage and handling. Breakage and rewraps are virtually eliminated.

What's more, PLIOFILM promotes brand identification because it prints easily in multicolors. It's adaptable to all types of machine packaging—heat-seals readily with hand tools in packaging at store level.

Why not put this rugged moistureproof film to work for you? The Goodyear Packaging Engineer will be glad to tailor a PLIOFILM package to suit your product. Write: Goodyear, Pliofilm Dept., Akron 16, Ohio.



Good things
are better in

Pliofilm

3-way protection against air, moisture, liquids

PACKAGING

1



1 Glass tumblers for National Dairy Products Corp.'s cottage cheese now feature gay circus decorations in applied color labeling to tie in with the CBS-TV Sealtest Big Top show. A set of six re-use glasses features Ringmaster Jack Sterling, Jingle the Clown and four of the show's animal stars. Glasses, Libbey Glass Div., Owens-Illinois Glass Co., Toledo; Anchor Hocking Glass Corp., Lancaster, Ohio; Federal Glass Co., Columbus, Ohio.

2



2 A stock window box for Easter eggs that offers custom-made advantages enables Mayo's to buy their holiday packages as needed instead of ordering them in advance and running the risk of overstocking. Individual inserts carrying the company's brand identity, printed to order, are visible through the acetate window of the set-up box. Box, Comly-Gillam Carton Corp., Philadelphia, using Celanese Corp. of America Lumarith acetate.

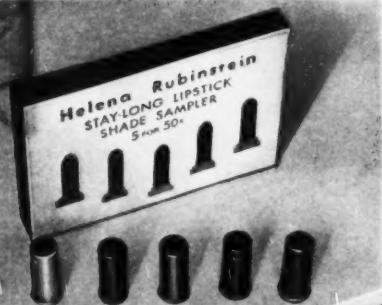
3



3 Bellows & Co. has relabeled its entire line of Gourmet Bazaar specialties. The new design retains the 18th century character of this 130-year-old company, yet provides modern identity for the entire line of fine food products sold through some 500 retail outlets and to 15,000 mail-order customers. The design, printed in two colors, is characterized by the Bellows chef and spoon motif flanked by cupids. Labels, Ar-Kay Printing Co., New York.

4 Five sample-sized lipsticks in plastic cases fit cartridge-like into die-cut openings in the face of this paperboard box to provide a 50-cent trial "lipstick wardrobe" from which a choice may be made of what full-sized Helena Rubinstein lipstick to purchase. Box, Robert Gair Co., Inc., New York. Plastic cases, Calumet Mfg. Co., Inc., New York, and United Plastic Corp., Fitchburg, Mass.

4



5 Flamingo fresh-frozen waffles, marketed by Leigh Foods Inc., have this new appetite-appealing, six-color rotogravure-printed cellophane wrap. Brand name in red and blue breaks into the full-color rectangle. Reverse printing adds sparkle to the wrap. Wraps, Milprint, Inc., Milwaukee.

5



6 The adoption of three-color-printed cellophane wraps by Ashley's Restaurant and Fine Mexican Foods is reported to have more than doubled sales of these aluminum tray-packed Mexican frozen foods in El Paso, Tex., and vicinity. Wraps, Shellmar Products Corp., Mt. Vernon, Ohio.

6



PAGEANT

7 A new application for the tear-tape opening is on wraps for Nestle Co. bouillon cubes. Use of the opening tape enables heat sealing of all joints of the wrapper, providing longer storage life and better protection. Without the tear tape, the completely sealed cubes would be too difficult to open. The tape, made of 600-gauge MSTL cellophane slit to 3/32 in., is applied to the cube across the web of the wrapper by a machine developed by Nestle engineers. "Zip Tape," The Dobeckmun Co., Cleveland.

8 In the few months that the Bork-Stevens' Master bread has been on the market in its new wrap and backed by an aggressive advertising program, sales have doubled, according to the bakery firm. Its predominant yellow and white colors are distinctive in mass display with strong remembrance value. Design, Lippincott & Margulies, Inc., New York. Wrap, Kalamazoo Vegetable Parchment Co., Parchment, Mich. End labels, Pollack Paper Corp., Dallas.

9 Fractional packaging is being applied to bags of Quartette ready-to-eat popcorn put out by the Post Trading Co. The duplex waxed glassine outer bag holds four smaller double-thickness waxed glassine inner bags, each containing enough for a good-sized bowl of popcorn. Printed design features the four-in-one bag as "Four times fresher." Bags, Milprint, Inc., Milwaukee.

10 Focal point of the new label for Alabama Flour Mills' Mother's Best mixed formula animal feeds for farm animals is a red 10-gal. hat trademark—a device which is providing a "hook" for all manner of promotional activity: red hats for truck drivers, performers in company-sponsored radio shows and shoulder patches for dealer employees. Each label also carries a drawing of the animal for which each feed is intended. Textile bags are made of dress prints. Design, Jim Nash, New York. Bag, Bemis Bro. Bag Co., St. Louis, Mo.

11 Diamond Crystal's new "Weather-pruf" iodized salt—tested in Connecticut and Indiana during periods of high humidity and found not to clog or cake in midsummer heat—is packed in the same sized canister as the regular Diamond Crystal shaker salt, but the words "Weather-pruf" dominate the front panel of the new package. The "Shaker Girl" trademark appears only on the back panel. Canister, American Can Co., New York.



7



OLD



8

NEW



9



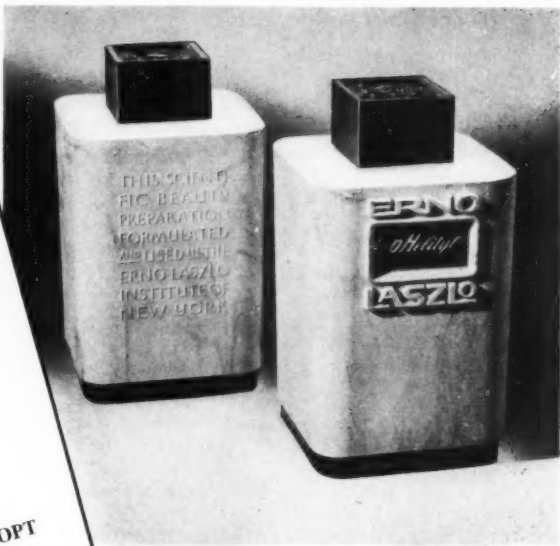
11



10

113

BASIC DESIGN is expressed by this 8-oz. bottle. It consists of a polyethylene liner enclosed in a classic-shaped marbelized polystyrene shell with black polystyrene base and closure. Shells are made by use of split mold permitting high relief of logotype, frame for the recessed label and relief lettering of inscription on the back.



*Carriage-trade
plastics*

NEW ERNO LASZLO COSMETICS ADOPT
ALL-PLASTIC CONTAINERS IN KEEPING
WITH THEIR HIGH-QUALITY APPROACH

Beauty stripped of tinselled glamour and empty promises." That was the basic concept that had to be expressed in the packaging for The Erno Laszlo Co.'s new line of scientific beauty-care preparations—probably among the highest-priced skin-care products ever marketed, appearing now on the counters of a limited number of leading department stores.

Heretofore these products were available only by appointment at the Laszlo Institute on New York's Fifth Avenue, where since 1939 Hungarian-born Dr. Erno Laszlo has been counseling stage, screen and society leaders on their beauty problems.

Now, through an unusual marketing technique, 15 Laszlo products are being packaged to sell at prices ranging from \$4.75 for a cake of soap to \$20 for a 2½-oz. box of special "sports" face powder, along with personalized beauty consultations and skin diag-

noses through Laszlo-trained experts in the stores and "invisible consultations" from the doctor himself via a coded questionnaire.

Packaging for this kind of merchandising demanded a design treatment as unusual as the marketing program itself. Dr. Laszlo had a number of very definite specifications. The packages had to carry out a "scientific" and "antiseptic" black-and-white appearance which he has consistently insisted on for the decor of his institute and laboratory. They had to suggest a line of women's preparations developed by a man and a dermatologist—no feminine frills were acceptable. They had to convey a feeling of elegance in keeping with high quality. They had to be modern, yet restrained and dignified, to inspire confidence in a venture combining scientific and medical knowledge with cosmetics. And they had to be con-

tainers so attractive that women would be proud to display them on their dressing tables.

To meet these requirements the company and the designer turned to plastics and created what they believe to be the first entirely molded plastics line of its kind in the cosmetics industry and one which, they feel, may start a trend to plastics packaging of high-cost prestige cosmetics. Nothing has been spared in the cost of materials, molds and assembly, some of the containers involving the assembling of up to five and six separately molded plastic parts. And nearly a year of planning was necessary to work out the technical details with suppliers of the plastic materials and the molders.

The entire packaging program consists of only five basic containers: an 8-oz. bottle, a 4-oz. jar, a 2-oz. jar, a powder box and a soap box. With only label changes, these five have been adopted for the entire 15 initial products, thereby simplifying inventory problems.

Keynote of the design is established by the 8-oz. bottle. This consists of a basic blow-molded polyethylene liner of square shape with threaded neck for the closure, insuring product compatibility, light weight and shatterproofness. The liner is enclosed in a rigid shell of high-impact polystyrene, hollow to save weight

and material, yet impart a feeling of permanence and stability. This shell, which gives the effect of an ever-so-slightly-tapered classic square column of white veined marble, is the chief luxury element of the container and carries the identity of all of the packages.

The column is cemented into a molded plinth of black polystyrene, forming the base of the container, which carries contents data, company name and address hot stamped along the vertical perimeter and a recessed square panel on the bottom to hold a printed paper directions-for-use label.

A chunky square closure of black urea completes the package. It is made in two pieces, having a threaded insert to assure alignment with the face of the bottle so that the finely molded cameo design on the top piece always faces the front of the package when the closure is screwed down tight.

The molds for the cameo design were executed by one of the most famous producers of medallions.

The dramatic manner in which the shell of the bottle is branded is made possible by the use of a split mold, according to the designer. This construction permits the high relief of the Erno Laszlo logotype, giving a very realistic effect of classic carved marble on the front face and at the same time providing a frame for a deeply recessed panel to hold a black and gold printed label with product name. This technique was adopted to avoid an "ugly pasted-on look" for the label. The split mold also provided for the classically lettered inscription or "credo" on the back of the shell, tying the products to the Laszlo Institute.

The very close attention to the fine details of the lettering do much to establish the distinguished character of the package group.

The 2- and 4-oz. jars are similar in construction and follow the design motif of the 8-oz. bottle. They consist of a threaded inner bowl of translucent polystyrene, enclosed in a molded shell and base, held securely by two matching lugs molded in the base of each. Split molds again permit the logotype panel and credo to be molded on the reverse faces of the shells. The circular screw cap is compression molded of urea plastic and it carries the same cameo design in the center.

The powder box is an adaptation of

the shell for the 4-oz. jar, but since no inner bowl is required, the threaded portion of the container is molded in one with the shell. A paper drum containing the powder follows the inner shape of the shell and is inserted through the bottom before the base is cemented into place. The base of the powder box is molded like that for the 4-oz. jar, but with the omission of the lugs for the bowl. The same screw cap is used for the powder box as for the 4-oz. jar.

The basic design motif has been modified for an elongated box to hold soap. This three-piece container is molded entirely of polystyrene. The logotype has been moved to the top to match its position on the soap and is thus molded in the black polystyrene.

The identifying paper labels on all the packages are reverse printed in black with hot gold-leaf stamping on a heavy, high-gloss coated stock. Copy was kept to a minimum to enhance the simplicity of the design and all titles were hand lettered in classic styles.

The high degree of accuracy required in die cutting the labels to fit in the small label area and the clarity of the reverse lettering provided a real challenge to the producer of the labels.

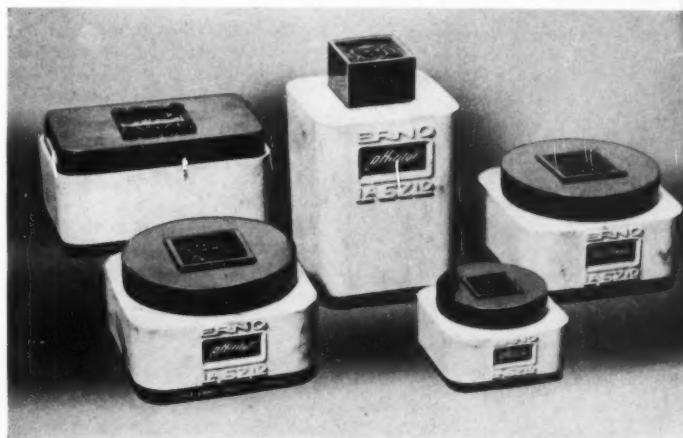
Because of the unusual character of these plastic containers, the company has de-emphasized the outer cartons,

which are to be used only for shipping, thus discouraging their use in mass display. They are simply blanked out of white stock and banded with a printed paper label carrying appropriate product identification to facilitate inventory.

Another interesting feature of the planning was the designer's insistence on a dull, matte finish for all of the container shells to give a more realistic effect of carved marble. This, he says, was achieved partly by the use of high-impact polystyrene, which has less natural luster than its unmodified version, and by polishing the molds only slightly. He believes this will be interesting to users of plastics who usually strive for an extremely polished, high-gloss effect in molded parts. A pleasing contrast has been achieved between the matte surfaces of the slightly marbled shells and the more glossy black urea bases and closures.

CREDITS: Design, Carl Otto, New York. Molded containers and closures, Bridgeport Moulded Products, Inc., Fairfield, Conn., and Colt's Mfg. Co., Hartford, Conn. Polyethylene liner, Plax Corp., Hartford, Conn. Polystyrene materials, The Dow Chemical Co., Midland, Mich., and Monsanto Chemical Co., Plastics Div., Springfield, Mass. Urea materials, American Cyanamid Co., Plastics Dept., New York. Labels, The Foxon Co., Providence, R. I. Mold for cameo design executed by Medallion Art Co., New York.

FIVE CONTAINERS—8-oz. bottle, 4-oz. jar, 2-oz. jar, a powder box and a soap box—constitute the basic unit to package some 15 Erno Laszlo products selling from \$4.75 for soap to \$20 for sports powder.





DRAMATIC PROOF of Teflon's release properties: adhesive on polytetrafluoroethylene-coated glue pitcher (right) strips off; conventional pitcher defies cleaning.

EASY TO CLEAN, these back-up rolls on carton-forming machine at Thomas J. Lipton, Inc., are coated with fused-on Teflon finish. Formerly, the job was tedious.



ALL PHOTOS COURTESY GENERAL PLASTICS CORP.

Non-stick machine parts

PACKAGERS FIND THAT TEFLON-FINISHED ROLLERS, SEALERS AND HOPPERS

OFFER FREEDOM FROM COSTLY CLEAN-UP OPERATIONS

The problem of preventing adhesion or cohesion in unwanted places is one that has occupied package-production engineers for a long time. Wherever adhesives are used, unproductive time must be spent in periodic clean-up of machinery and many products themselves have a nasty way of clinging to filling hoppers and other parts of machines, preventing accurate and efficient operation.

Now several packaging companies (including Thomas J. Lipton, Inc., Rockwood & Co. and the Lightfoot Schultz Co.) report encouraging results with use of the non-stick plastic, "Teflon"¹, in a new, economical form-coated like paint on machine parts. Several machine builders are taking it up and the possibilities appear so interesting that MODERN PACKAGING has made a survey of existing applications and the indications for further developments.

Teflon is a polytetrafluoroethylene

plastic with unique properties, including a remarkable range of high and low temperatures (575 above to 100 below zero F.) at which it is impervious to any change. Most important to this discussion is the fact that almost nothing will stick to it. No known solvent or adhesive will affect it.

Previously, sheets of Teflon, as distinct from coatings, have been successfully used in packaging to prevent the sticking of polyethylene and other soft plastics to the bars of heat sealers. The new fused-on coating process greatly extends the useful range of applications not only because it uses far less of the expensive plastic, but because the plastic is fused to the metal and requires no other fastening, such as the spring loading sometimes needed to assure tautness when Teflon sheets are used. In addition, coating is practical for irregular or angular shapes.

At the Hoboken plant of Thomas J. Lipton, Inc., Teflon finishes are now being used on several working

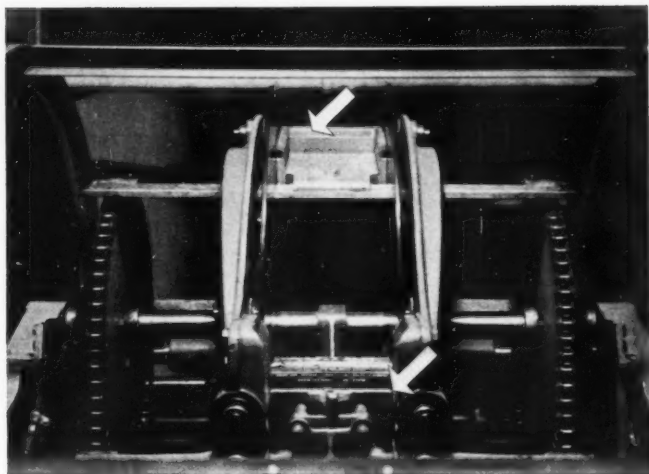
parts of standard carton-forming machines and also on the heater plates of heat sealers used to seal the cellophane with which the cartons (used for tea bags) are wrapped.

The Teflon-coated parts of the carton former² are the back-up rolls and the mandrels. Formerly, the back-up rolls (which apply the pressure required to transfer the glue from the glue segments to the carton blank) picked up glue. This interfered with the flow of the carton blanks. Also, the glue would harden on the rolls and had to be cleaned off periodically. This called for the use of a scraper, wire brush and plenty of elbow grease. The job was tedious and time consuming, and there was a risk that the cleaning and scraping would, in time, permanently damage the rolls.

Lipton finds that rolls coated with Teflon resist glue build-up and a girl can now clean the rolls merely by wiping them with a cloth. Fewer in-

¹ Brand name of polytetrafluoroethylene materials developed and produced by E. I. du Pont de Nemours & Co., Inc., Wilmington, Del.

² Model PA Palmer continuous-motion carton former, manufactured by Package Machinery Co., Springfield, Mass.



IMPROVED QUALITY of cartons results from Teflon coatings on mandrels (arrows) of carton former. Mandrels are kept clean of glue deposit which might cause blanks to jam and throw score lines out of register.

ruptions caused by carton jam-up result, fewer cartons are spoiled and the rolls can be cleaned in less than a minute.

Teflon finishes on the mandrels, around which the carton is formed, are applied on the exterior surfaces that come in contact with the carton blank. These finishes increase length and width of the block 0.003 in., which is such a small amount of added thickness it does not affect score lines.

The net effect of the coating on the mandrel is to resist build-up of improperly transferred glue and thus prevent jamming. This reduces spoilage and provides for more accurate register of score lines. Better quality results and there is reduced maintenance for cleaning.

Similar coatings used by Lipton on the heater plates of cellophane-wrapping machines eliminate sticking and prevent build-up of carbon deposits and other foreign matter. In addition—and these were unexpected advantages—the coating reduces the drag over the heater plate, operating temperatures have been reduced up to 50 deg. F. or more and it has been found practical to decrease side pressures. The net result is a better seal. One reason for this is the fact that a more even transfer of heat occurs through the Teflon coating, which, although it is a poor conductor, is thin

and uniform. The elimination of carbon and other deposits is, of course, also important in effecting uniform heat transfer.

Elsewhere, Teflon finishes applied to glue pots are helping to make a box manufacturer's job easier. The example cited here indicates the non-sticking advantages would be equally applicable in certain packaging-line operations where the glue pot is exposed to the air, allowing water or solvent to evaporate, or where parts of the packaging machinery are splattered by operations at high speed. Teflon coatings, accordingly, might be advantageous in facilitating the cleaning of adhesives storage tanks on certain types of packaging machinery, such as top and bottom sealers, or on those parts where the film might dry and thus clog return of the adhesive to the storage tank.

The Empire Box Corp., in a drive for better methods, had two bottom glue pots for straight-line gluers and nine 2-qt. adhesive pitcher dispensers coated inside and out with Teflon.

The experience to date indicates that the coating definitely retards build-up on the walls of the glue pot and rejects film adhesion. It also prevents rust and rust contamination. When build-up of the adhesive finally occurs, it can be stripped off by hand quite readily. The same is true of the

dispensers. Labor costs for adhesive change-over and cleaning of pots can be reduced approximately 30 to 50%, it is reported, and, of course, the reduction of gluing-machine down time is an important factor. Since the glue pots are quite expensive, the additional protection afforded by Teflon against wear and cleaning damage is also worth considering.

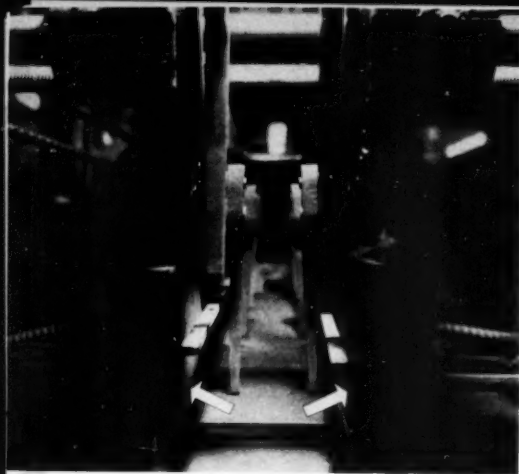
The boxmaker for years, of course, has been confronted with the very annoying problem of cleaning carton-gluing machine glue pots. The cleaning is customarily accomplished by various methods, such as soaking the pots in water, steaming and scraping. Regardless of how the cleaning is done, it is a slow, dirty and tedious job.

In recent years, the problem of cleaning the pots has become aggravated because of the ever-increasing number of specialty adhesives used in box manufacture to provide a strong and positive bond against such elements as vapor, water and heat. Frequent changes from one type of adhesive to another are required. In many instances, the glue pot must not only be drained of previous adhesive, but must also be thoroughly cleaned, since various types of adhesive will not mix without causing contamination that will result in adhesive failure.

The packager, also, is frequently faced with the problem of avoiding adhesive contamination, for he, too,

CLOSE-UP OF MANDREL of Lipton machine, which has 0.003-in. baked-on Teflon finish on sides, bottom and top edges. Teflon by this method can readily be applied to complex shapes.





LOOKING INTO a Lipton heat sealer which has Teflon finishes on heater plates (arrows). The coating resists carbon deposits on plates, permits lower temperatures for sealing, helps produce a better cellophane over-wrap for tea cartons.

is using an ever-increasing number of adhesives on a wider range of materials to assure specified performance.

Because of the relatively short term of Empire's experiment (about seven months) with the Teflon-coated pots, no estimate can be made of the life duration of the coating. When this factor has been established, the time element vs. cost vs. advantages and savings can be reckoned. It should be noted that the condition of the pot is a critical factor in regard to cleaning cost and effectiveness of the coating. New pots or those in good condition cost least to coat and give the best results.

A third potentially useful field of application for Teflon finishes is in the handling of non-free-flowing products such as powdered soap and detergents, or other products such as candy and frozen foods, that are apt to stick even to the smoothest metal surfaces. Indicated possible uses are the coating of chutes and hoppers of filling equipment and special conveyor devices.

Rockwood & Co., manufacturer of chocolate and cocoa, employs Teflon coating on a vibrating feeder tray³ handling small chocolate pieces just prior to the point at which they are filled into cellophane bags. Formerly chocolate would start to build up on the feeder tray in a matter of two or three hours. Once the build-up started, it would increase very fast and interfere with the flow of the product. Teflon coating on the stainless steel tray now permits uninterrupted runs for several days and, when build-up does occur, the trays are easy to clean.

³ Syntron vibrating packer, Syntron Co., Homer City, Pa.

Another firm, the Lightfoot Schultz Co., is using the anti-stick coating on a filling-machine scale handling powdered soap. The coating, the company says, has greatly improved the flow of material, which ordinarily is difficult to handle, especially when subject to atmospheric variations that cause the soap to lump or stick.

A packager of detergents is using coatings on the measuring cylinders of the rotating head of a filling machine to expedite free flow. Here, again, the coating is reported to be quite successful for its intended purpose.

Teflon finishes are generally fused to package-machinery parts by independent custom applicators. A thoroughly clean metal surface is essential to effective coating. Naturally, factory-new parts or those not seriously worn obviate much of the cleaning.

In the case of parts such as heat-sealing plates, cleaning may involve vapor de-greasing, wire-wheel brushing to remove extra surface deposits and baking out the parts at temperatures up to 800 deg. F. to force out the volatiles left in the pores. This is followed by "liquid honing," a method employing a very fine abrasive carried in water and designed to clean the metal surface without affecting its contour or dimensions.

After the metal surface is cleaned, a prime coat of Teflon is sprayed on the metal, the thickness of the coat varying between 0.0003 and 0.0006 in. The prime coat is fused onto the metal surface in electric ovens at 700 deg. F. Two or more clear coats of Teflon are then individually sprayed on and fused on. In all, three typical coats add only 0.0015 in. of thickness to the

article treated. The prime coat ordinarily used is green in color, which is easily distinguishable and induces caution in handling the coated parts. It also serves as a visual guide when wear occurs. Reports received indicate seven or eight months of service in certain operations. Obviously, service life will vary up or down depending on the number of packages handled.

Since the coating process is usually applied at the custom applicator's plant, several days to a week or longer are required for shipment of the part, completion of the job and return. Users to date report the problem of down time for coating or re-coating is satisfactorily handled either by stocking spare parts or by advantageously scheduling the coating operation to coincide with scheduled line shutdowns—on week ends or during vacation layoffs. Obviously, where practical, use of stand-by parts is the most reliable procedure.

Teflon coatings can be applied to numerous types of metal surfaces, including iron, steel, brass and chromium, but are not recommended for copper, tin, cadmium plate, galvanized parts or soft-soldered joints. The heat processing also does not lend itself to the coating of rubber rolls or similar material. However, Teflon finishes may be coated to foil, which can then be mechanically laminated to the rubber roll. Of course, solid rolls of Teflon could be machined to the proper dimensions, but this would be costly and the rolls would not have the resiliency of rubber and might therefore lack the necessary operating characteristic for the required job.

Teflon coatings are apt to be least effective where abrasive action is involved, for the coating has low resistance to rubbing or scuff from hard or angular surfaces. For example, coatings would be subject to relatively rapid wear where paper had to be drawn over the coated metal.

These and other special limitations are such that Teflon finishes cannot be considered a cure-all for every handling problem with every stick-easy material. However, the development is now in its very early stages and as more types of applications are tried and perfected it is likely that non-stick coating will become an accepted technique in scores of packaging problem situations.

CREDIT: Custom finishing of metal parts with "Teflon" finishes, General Plastics Corp., Clifton, N. J.

Educational cartons

UNION PHARMACEUTICAL CO. GETS ACROSS TWO NEW SALES STORIES

WITH CAREFULLY PLANNED COUNTER DISPLAY UNITS

With one famous product now available in a new form and a new product being marketed under the Inhiston name, Union Pharmaceutical Co., Inc., Montclair, N. J., has utilized packaging to help do an educational selling job. The new packaging reflects the thinking of Walter B. Smith, Union's vice president and general manager.

By planning copy and illustrations for the panels of display cartons to emphasize and explain the "new" features, the company reports that it has found packaging an effective "text book" for both products.

The need for informative sales copy on the display package was most serious in the case of Saraka, a bulk laxative which Union Pharmaceutical has marketed in granular form for more than 15 years. Recently the company's research laboratories developed Saraka in tablet form. The packaging problem in merchandising these new, convenient, easy-to-take tablets was to create a counter dispenser unit sufficiently striking to impress salesmen, druggists and consumers that the tablets are the same Saraka they have always known—but in a new form. For competitive reasons the company also wished to stress that three tablets are equivalent to one tablespoon of Saraka granules—the normal daily dosage—and that the tablets are therefore packaged in connected strips of cellophane in units of three so that a day's supply can be detached and conveniently carried.

The paperboard carton designed to fulfill these requirements utilizes the space on the die-cut top panel, which folds into the back piece, to highlight at point of sale the new form and package feature.

The latter is done by means of a well-placed illustration showing a hand tearing off a cellophane strip which appears to be pulled right out of an actual package in the carton. The daily dosage equivalence feature is given prominence by printing it next to the name on the two side panels.



WHAT'S NEW is graphically explained on counter cartons and unit packages. New tablet form of Saraka is quickly conveyed by illustration of hand tearing off strip containing a day's supply of the product. Inhiston-APC is new product marketed under the established Inhiston name.

To aid in establishing the association between the tablets and the regular Saraka, the color and design, including the distinctive name logotype of the granule package, has been adapted to the tablet cartons, with the addition of a pictorial top border illustrating the tablets. Each display carton contains six regular-size (66 tablets) packages, one large, economy-size package (132 tablets) and a small die-cut paperboard shell into which printed sales inserts fit.

The second display carton was designed by Union Pharmaceutical to introduce its new Inhiston-APC tablets. Here the educational problem was to establish the fact that a new product is being distributed under the Inhiston trademark, which has been associated heretofore only with antihistamines.

Although the initials "APC" have been a popular abbreviation for some of the new tablets' contents—*aspirin*, *phenactin* and *caffeine*—the copy

printed on the back piece and other panels of the display carton as well as the front panel of the individual package suggests another group of words for the initials: "aches, pains, colds." By accentuating the first letter of each word typographically and by adding explanatory phrases such as "for prompt symptomatic relief of" and "insist on" between the name and these words, the product's purpose is virtually spelled out.

Brand association is also established for the new product by printing packages and display cartons in the Inhiston colors—pink and black on white.

The company reports that trade sampling on the effectiveness of both cartons in retail outlets indicates they are doing their educational job well and attracting favorable comments because of their attractiveness.

CREDIT: Individual and display cartons, Wilkata Folding Box Co., Kearny, N. J.



Styrene forms the base of this self-service merchandiser for packets of Fleischmann's Yeast, being test marketed in the Chicago area. It holds a 9-in.-high paperboard carton die cut for dispensing through the slot in the plastic. Bottom portion of base is blue, the upper portion transparent. Plastic base, Columbia Protektosite Co., Inc., Carlstadt, N. J. Carton, Sutherland Paper Co., Kalamazoo, Mich.



A gigantic 4-ft.-tall reproduction of a red rose stemming from this package of Armour & Co.'s Vertagreen plant food creates a spectacular window display. The rose, which is part of this full-color lithographed paperboard display unit, is pulled forward and attached to the store window with pressure-sensitive tape applied by retailer. Display, Einson-Freeman Co., Inc., Long Island City, N. Y.



Newest display piece for Glenmore Distilleries Co.'s Old Thompson brand is this miniature billiard table, complete with tiny cue and billiard balls, and an actual bottle of Old Thompson. Titled "Your Cue To Quality," the unit is lithographed in full color on paperboard, except for the polystyrene cue and balls, which are third dimensional. Display, Phelps Mfg. Co., Terre Haute, Ind. Plastic parts, Kusan, Inc., Nashville, Tenn.

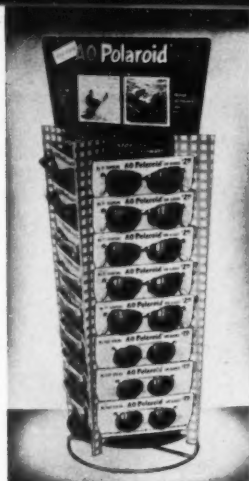
DISPLAY

King's Men, Ltd., is taking advantage of the fast-growing men's toiletries business in drug and department stores by offering this de luxe counter display case that creates a complete men's toiletries department within itself. The unit, compartmented to accommodate various bottle and carton shapes, is made of composition material and glass.

This action display introducing Cee-Clear Windshield Washer, a new product marketed by Plaze, Inc., has the actual product in its polyethylene squeeze bottle mounted at the top of the paperboard unit. A squeeze of the bottle shows just how the product works—the liquid squirts out onto the reproduction of the windshield. When the bottle is not being squeezed, the art work on the windshield still shows the squirting action of the bottle. Plaxpak squeeze bottle, Plax Corp., Hartford, Conn.

Lucky Strike's new paperboard flasher display is vinyl coated for increased durability. Stains are easily wiped off with a damp cloth. The colorless vinyl maintains the dead-white of the carton when the unit is illuminated from inside. Display made by Consolidated Lithographing Corp., Long Island, N. Y., using Bakelite Co.'s Vinylite plastic.





American Optical Co.'s new rotating merchandiser displays 42 pairs of Polaroid sun glasses in only 1 sq. ft. of counter space. Theme of the wire and paperboard unit is "Stop the glare—Light to wear." Two color pictures at top demonstrate the glare-removing property of the lenses. Display, Davidson-Hansen, Inc., New York.



Cluett, Peabody & Co., Inc., has developed this interesting new way to create a mass display by grouping together several shipping cartons. Cartons of Arrow Guards brief-type knitted shorts, set up side by side, give a complete message on features of the garment, including size tickets. This utilitarian method of display is economical and requires no stock keeping, for a new box can be replaced as soon as stock diminishes. Cartons, Robert Gair Co., Inc., New York.



GALLERY

Fifteen national manufacturers have joined in merchandising their products in this self-service corrugated floor stand conceived jointly by McKesson & Robbins and Crowell-Collier, to promote sales of economy-size drugs. A rotating system assures equality of display emphasis. Display, Gibraltar Corrugated Paper Co., Inc., North Bergen, N. J.



Four sizes of Pure Bristle paint brushes made by Colonial Brush Mfg. Co. fit in the front of this new four-color printed paperboard display. Alongside each brush is a spot carrying the brush size and space for price marking. The display box is made in three sizes for various assortments of brushes. Design, Harold Schuman, Boston. Box, Robertson Paper Box Co., Inc., Montville, Conn.



Next Christmas retailers of General Electric Co.'s Christmas tree bulbs will be supplied with this factory-packed merchandiser containing a pre-selected assortment of Yule lamps. The heavy paperboard unit, shown held by a model, is illuminated by a string of lights. Front tray may be pulled forward to create bins for loose bulbs. Display, The Ohio Boxboard Co., Rittman, Ohio.

First prizes for superiority



COSMETICS

High sales value and economy of space are achieved here.



FOOD

Italian national colors—red, green, yellow—establish appeal by drastic design change.



SOAP

Effective surface design and good construction combine to make this winner.



BAKERY

Excellent eye appeal for supermarket merchandising won this carton a first award.



CONFECTIONS

Standard 8-oz. carton holds four individual cartons for gift use.



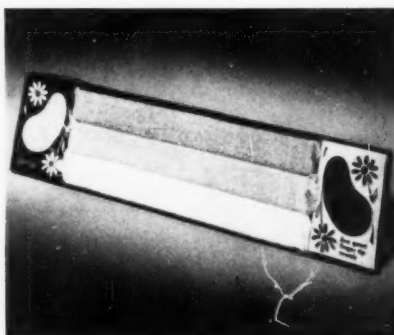
TOBACCO

Laminated foil folding carton makes an unusual Christmas gift package.



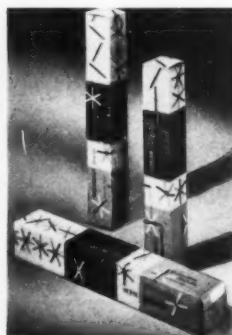
HARDWARE

Family group of cartons affords brand identity and sell appeal.



TEXTILES

Three-color-printed carton promotes multiple-unit sale of towel sets for gift giving.



PAPER PRODUCTS

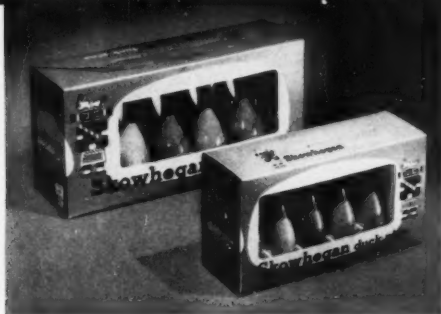
Artistic carton reflects character of this wallpaper.

according to end use



BEVERAGES

Eye-appealing carton has effective display value.



TOYS

Design of duck-pin window carton, used for entire line of toys, has rapid identity and good visibility.



MISCELLANEOUS

Maximum product protection was the aim of this package design.

Folding-box awards

BOX MAKERS' BEST IN ANNUAL COMPETITION ARE CHOSEN FROM 2,776 ENTRIES

OUTSTRIPPING LAST YEAR'S RECORD BY 102%

Winning entries in the 1952 carton competition sponsored by the Folding Paper Box Assn. of America were highlighted at the annual meeting of the association, held at the Drake Hotel, Chicago, on March 17, 18 and 19. First and second award winners in the various categories, along with packages receiving honorable mention and many of the other entries submitted this year, were on display during the meeting.

As in previous years, the Grand Award winner was chosen during the meeting on the basis of a poll of those in attendance.

The 1952 competition far outstripped all the association's previous contests, attracting 2,776 entries and taxing the display facilities of the hotel. This record entry list marked an increase of 102% over last year's competition and was almost 2,000% greater than that of the first competition, held in 1946.

Announcement of the Grand Award winner and winning entries in the various competition categories was made on March 19, following the general

business session of the annual meeting. Covering production, labor relations, safety, the general business outlook and other topics of vital concern to box manufacturers, the meeting was climaxed by the annual banquet and entertainment.

Rules of the 1952 competition were broadened to bracket the diverse activities of the folding box industry. Boxes and other entries, which to be eligible were required to have been produced for the first time after Jan. 1, 1951, were judged in 15 different end-use categories and divided into five major classes to facilitate evaluation. These classes were as follows:

A. Best artistic design.

B. Printing, including (1) best multicolor printing and (2) best one-color printing, from a technical standpoint.

C. Construction, covering (1) ingenuity of construction, based on suitability, economy, speed of assembly, novelty features, protective qualities and general merchandising adaptability and (2) best display container, limited to containers designed for dis-

Grand Award

The 1952 Grand Award winner was the Coca-Cola Picnic Carrier made by The Gardner Board & Carton Co., illustrated on page 125. Selection was made on the basis of a poll of those in attendance at the FPBA meeting.

Jointly with a similar Seven-Up carrier, the Coca-Cola Picnic Carrier won first award in the "Carriers" classifications for end use and first award for "Best Potential Use for Paperboard."

Made of special 0.029 carrier board, the carton is reported to keep drinks cold for 12 hrs., holding up to 12 bottles. Ice can be distributed around the bottles in the leakproof carton, said to be capable of re-use as many as six times. Printing is Coca-Cola red and disappearing wire handles with plastic tubing provide a comfortable grip.



Best artistic design

FIVE DIFFERENT gift assortments are combined here as a single unit.

play of merchandise in retail outlets.

D. New uses, covering the best examples of potential new volume uses for paperboard. Awards were based on the best examples of creative thought and adaptation leading toward development of new markets for folding cartons and increased conversion of paperboard in previously unexploited fields of use.

E. General superiority according to end use. Here awards were based on the functions of the folding carton, including protection of product, brand identification, convenience, sanitation, economy and sales value, with particular emphasis on merchandising appeal.

An added feature of the carton displays this year, staged separately and attracting much interested comment from those attending the meeting, consisted of a packaging conversion exhibit showing products which might profitably be packaged in folding cartons.

In response to a large number of letters received from independent package designers demanding recognition on the award certificates presented to the winners of the competition, the board of directors scheduled this matter for consideration during its current annual meeting. The executive committee, after reviewing in detail the designers' arguments and the recommendation of its public relations committee, felt that the far-reaching implications of the question were sufficiently important to warrant a decision by the association's board members. The decision of the directors, reached after selection of this year's award winners, therefore, will not become effective until the next FPBA competition.

Judges of the 1952 competition were impressed by the tremendous variety of new and old style cartons adapted to new uses which swelled

the record entry list. Award-winning cartons of past years, in addition to receiving prominent mention in the press, have also been exhibited in London, Brussels and Paris.

Following are the groups of judges who selected the winning entries and honorable mentions in the 1952 carton competition:

Class A—Best Artistic Design: William Chadsey, Foote, Cone & Belding; Leo McDonald, Custom Exhibits, Inc.; J. O. Reinecke, J. O. Reinecke Associates.

Class B—Technical Superiority of Printing: Burton Cherry, Cuneo Press, Inc.; Walter Howe, R. R. Donnelley & Sons Co.; R. H. Middleton, Ludlow Typograph Co.

Class C—Technical Superiority of Construction: Walton Crane, Alpak Package Design; Ernst Speuhler, Speuhler Studio; Don Walkoe, Advertising Art.

Classes D and E—Best Potential New Use and End Use: Harry Bettendorf, Fibre Containers; Robert Dunlop, Dominion Paper Box Co. (Canada); R. A. Irwin, Somerville Limited (Canada); D. J. Snell, Manchester Paper Boxes, Ltd. (Canada).

A summary of the award winning entries in the various end-use classifications of the 1952 competition follows:

Best Artistic Design, Class A: *First award* went to Blum's family-group carton, made of WPC solid "butter-box" manila board and printed in six colors. This carton, manufactured by the Fleishhacker Paper Box Co., San Francisco, solved the problem of packaging five different gift assortments of candy in one unit for novelty display and gift value, and of providing a "family" pack. The Thor spare-parts family boxes made by Container Corp. of America, Chicago, for the Independent Pneumatic Tool Co. took *second award* for Best Artistic Design, as well as second award in the Hardward End-Use class. *Honorable mentions* in this group went to H. W. Gossard foundation boxes made by the Paper Package Co., Indianapolis; Martin Senour color file box made by Container Corp. of America; Burroughs' office-equipment family cartons manufactured by Robert Gair Co., Inc., New York; Ballard & Ballard prepared-mix boxes made by The U. S. Printing & Lithograph Co., Cincinnati; Mrs. Steven's candy boxes made by Ace Carton Corp., Chicago; Elizabeth Arden Christmas cosmetics packages

Superiority of printing

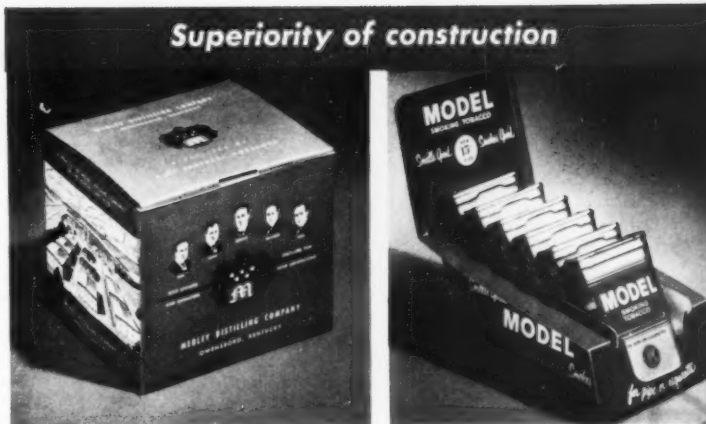


NATURAL-COLOR photograph was used to achieve for this box the light, fluffy appearance of the cake texture.

manufactured by Robertson Paper Box Co., Inc., Montville, Conn.

Superiority of Multicolor Printing, Class B: *First award* went to Hills Bros. Co.'s Dromedary White Cake Mix carton made by The Lord Baltimore Press, Baltimore, Md., of 0.022 clay-coated board and printed in four colors, with overprint varnish. Requirement of the job was to achieve a light, fluffy appearance of cake texture. Original art was a natural-color photograph. Schenley Distillers' Gibson whiskey carton made by the U. S. Printing & Lithograph Co. took *second award*. *Honorable mentions* were Procter & Gamble's Cheer giant-sized soap carton made by The Gardner Board & Carton Co., Middletown, Ohio; Kinsey whiskey carton made by The U. S. Printing & Lithograph Co.; Avon "Forever Spring" cosmetics packages made by The Lord Baltimore Press; Wamsutta Mills' Superscale boxes made by Container Corp. of America; Style Center retail boxes made by the American Box Board Co., Chicago; Four Roses whiskey carton manufactured by The Lord Baltimore Press.

Superiority of One-Color Printing, also Class B: No first or second awards were made. *Honorable mentions* went to the Elizabeth Arden Christmas cos-



INGENUITY OF CONSTRUCTION—a 10-cell carton made from one piece of board.

DISPLAY CARTON cited for *Superiority of Construction*.

metics packages (also an honorable mention in the Artistic Design group) and to the Hudson candy boxes manufactured by the Paper Package Co.

Superiority of Construction, Class C: *First award for ingenuity of construction* went to the Medley Bros. miniature whiskey-bottles carton

made by The Bradley & Gilbert Co., Louisville, Ky. Object of the box, which is made from WPCNB board and printed in three colors, was to produce a rapid setting-up, 10-cell carton from one piece of board. *Second award* was given to the Elizabeth Arden Blue Grass cologne carton manufactured by the Robertson Paper Box Co., Inc., from WCCMB board, printed in five colors and varnished. *Honorable mentions* in this category were the Treasurescope carton made by the Standard Paper Box Corp., Los Angeles; the Beacon camera gift box made by National Folding Box Co., Inc., New Haven, Conn.; Fieldcrest Mills' blanket box made by Container Corp. of America; the carton for Bell Electric Co.'s No-Shok electrical attachments made by the Acme Paper Box Co., San Francisco; the Duncan tea carrier manufactured by Container Corp. of America. *First award for best display* in the Superiority of Construction grouping went to the U. S. Tobacco Co.'s Model tobacco display carton, manufactured by the National Folding Box Co., Inc. Purpose of this carton was to create a "Snap Rack" counter display that would be carried flat by the company's salesmen for setting up and filling in stores, then placed in prominent spots. Board used is 0.026 BM, laminated on the news side and clay coated, white. Printing is in one color and silver. The box for Treasure Island glass sets, manufactured by American Coating Mills Div. of Owens-Illinois Glass Co., Chicago,



GRAND AWARD WINNER, winner in the "Best Potential New Use for Paperboard" classification and winner under "Carriers" in the End-Use category—the Coca-Cola leakproof carrier-cooler that will keep drinks cold for over 12 hours. Similar Seven-Up carton won in latter two classes.

took *second award*. *Honorable mentions* went to the Holiday fruit-cake carton and the Sofskin display, both manufactured by The Gardner Board & Carton Co.; the Velocia display made by the Bradley & Gilbert Co.

Best potential New Use for Paper-board, Class D: *First award* was won by the Coca-Cola and Seven-Up picnic carriers manufactured by The Gardner Board & Carton Co. for Coca Cola Co. and Seven-Up, Inc. The Coca-Cola carton won Grand Award and both carriers shared first award for End-Use Carriers. It is made of special

0.029 carrier board. The cooler will keep drinks cold for over 12 hrs., the carton can be reused six times and is leakproof. *Honorable mentions* went to "The Greatest Story Ever Told" book and record combination carton manufactured by Container Corp. of America; the Cedacote moth-preventive carton made by the Bruce Carton Co., Memphis, Tenn.; McNair's Yield-Tested Seed Co.'s tobacco carton manufactured by The Gardner Board & Carton Co.; the orange carrier carton manufactured by Alford Cartons, Ridgefield Park, N. J.; the ice-cream-

sandwich carton made by the Old Dominion Box Co., Lynchburg, Va.

End-Use categories, Class E: 15 different awards were made in various product fields as follows:

Medicinal. No first or second awards were made here. *Honorable mentions* went to the Nullo chlorophyll tablets display carton manufactured by the Ace Folding Box Corp., White Pigeon, Mich.; the Clorodets gum display and individual cartons made by the Robert Gair Co., Inc.; Johnson & Johnson's Band-Aid family cartons manufactured (This article continued on page 180)

1952 variety store package winners

Outstanding variety-store packages as exemplified by the 19 award winners in this year's annual packaging competition sponsored by *Variety Store Merchandiser* magazine are notable for showing how style conscious packagers are for this market.

With over 225 qualifying entries in the four merchandise divisions, selection of the winners was based on how

well the package met the challenge of the "open counter" from a display standpoint, remaining fresh and salable despite constant customer handling and with minimum bulk and weight. The competition, which is designed to stimulate better packaging of five-and-ten merchandise, was judged this year by: N. L. Jones, S. H. Kress Co.; A. T. Bryer, S.S. Kresge Co.; Robert Martz,

Rose's 5¢, 10¢ & 25¢ Stores; and Alan Berni, package designer.

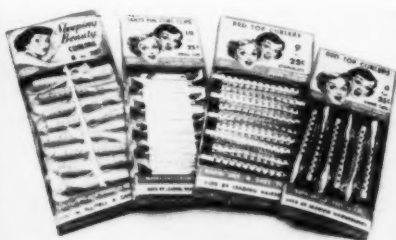
The award winners were:

Toiletries: *Gold award*—"White Rain" shampoo lotion of The Toni Co. *Silver awards*—Northam Warren Corp.'s Cutex Spillproof Nail Polish; the new Frostilla Fragrant Lotion of Wildroot Co.; Balm Argenta Hand Lotion Pillsows manufactured by W. O. Washburn & Sons, Inc. and Benjamin Anschl Co.'s Award Cologne in Trophy Cup.

Notions: *Gold award*—packages for a line of hair curlers manufactured by Solo Products Corp. *Silver awards*—Self Cover Buttons package of The Risdon Mfg. Co.; two packages for Dritz Skirt Marker and Dritz Seam Ripper made by John Dritz & Sons and Yale Belt Corp.'s Tom Corbett Space Cadet Suspenders.

Household & Hardware: *Gold award*—display carton used by Squeeze-it Corp. for its polyethylene catsup dispenser. *Silver awards*—sandwich bag package used by Ben Mont Papers, Inc.; Kenilworth Stainless Steel Flatware package of Ecco Products Corp and the Aluminum Specialty Co.'s Drink Mixing Set (#2538) package.

Toys & Stationery: *Gold award*—carded toy milking cow, "Jersey Jessie," manufactured by Thomas Mfg. Corp. *Silver awards*—Package Wrapping Kit of Dennison Mfg. Co.; Toddler Train toy package of Strombeck-Becker Mfg. Co.; the "Doll-E-Dodish" set package of American Metal Specialties Corp. and The Monoco Co.'s Yale Jr. Baseball Glove & Ball Set package.



GOLD AWARD WINNERS: White Rain package, for design attractiveness and consumer appeal; display carton for polyethylene catsup dispenser, for dramatic presentation of product and its use; hair curler in cellophane-wrapped paperboard tray, for their sanitary "pre-packaged" appeal; milk-cow toy card for display excellence with minimum bulk and weight.

Burt makes fine cartons

You'll be proud of yours

Burt has a special knack
with imaginative cartons
that make sales hop along
at a pretty pace.



F. N. Burt Company Inc. - Manufacturers of Small Set-up Boxes, Folding Cartons and Transparent Containers - 500-540 Seneca Street, Buffalo 4, New York - Offices in Principal Cities Or Write Direct - Canadian Division, Dominion Paper Box Co. Ltd., 469-483 King St. W., Toronto, Canada

This Package Sells the Product Serves the User



Crackers for individual serving are wrapped in cellophane with easy-opening tape on our machines, especially designed to prevent breakage of crackers.



Frankfurters displayed at their best! Franks, enclosed in printed bands, are tight-wrapped at 60 packages a minute on our specially adapted machine.



This package prevents ice cream from melting. Our machines enclose the carton in an insulating inner wrap and outer printed wrapper at up to 80 packages a minute.



This popular tissue wrap is actually a dispenser. When tape is zipped off, a clean-cut opening is made through which tissues can be drawn.

The convenient pocket-size package of tissues is an outstanding success. It has proven ideal for outlets such as drug and variety stores, newsstands, etc. Makes arresting displays . . . Serves as a reminder—stimulates impulse sales. And when opened, the wrap serves as a dispenser for the tissues.

Like many other sales-building ideas in wrapping, this one was developed by our engineering staff. Our versatile Model FA machine fashions the ingenious wrap at high speed, inserting an easy-opening tape, and locating the eye-catching printed design with uniform accuracy.

Perhaps we can help you, too

During the past 39 years America's manufacturers of packaged goods have consistently put their packaging problems up to "PACKAGE". During this time our engineers have pioneered many outstanding developments, resulting in increased sales and lower wrapping costs. Our nearest office is prepared to give you every assistance in solving your problem. Write or phone today.

NEW YORK	CHICAGO	BOSTON	CLEVELAND	ATLANTA
DALLAS	DENVER	LOS ANGELES	SAN FRANCISCO	SEATTLE
VANCOUVER, WASH.	TORONTO	MEXICO, D.F.		

**PACKAGE
MACHINERY COMPANY**

WRAPPING DIVISION
SPRINGFIELD, MASSACHUSETTS

TECHNICAL

ENGINEERING • METHODS • TESTING

Charles A. Southwick Jr. • Technical Editor

Engineering a cushioned package

DESIGN CALCULATIONS NEED NOT BE COMPLEX, IF LOAD-COMPRESSION

CHARACTERISTICS OF CUSHIONING ARE KNOWN. By John L. Gretz*

The importance of adequate protection against mechanical damage in the shipment of instruments, electronic products, optical components and similar products is generally realized by packaging engineers. On the other hand, except for the "common-sense" rules of proper support, elimination of slack space, even distribution of weight and other factors that are known to contribute to a successful pack, the principles and methods governing cushioning materials are not part of the working knowledge of most packaging engineers.

Fortunately, a large amount of work has been done in the field of package cushioning since 1944 by Dr. R. E. Mindlin of Columbia University, Mr. Kellicutt of Forest Products Laboratory and Mr. A. M. Underhill of General Electric Co., so that the methods and information to design cushioned packages are readily available to those engineers sufficiently interested in ferreting out this information. However, their methods require tables of information on the materials to be used or relatively complex design calculations and cannot be directly applied in the case of cushioning materials that are new or for which design tables are unavailable. The result is that most packaging engineers resort to the trial-and-error method of inserting samples of varying densities or thicknesses into the package until it passes the required drop test or shipping tests.

Another procedure is available that

is relatively simple and based on sound engineering practice. Essentially, it consists of determining the compression characteristics under various loads of the cushioning to be used and making a simple set of arithmetical calculations to determine the exact thickness and density of materials required. If cushioning-material suppliers can furnish the required load-compression curve with their material, this method will be further simplified for the packaging engineer. The method is explained here in detail.

Package mechanics

An introduction to package mechanics commences with inspection of

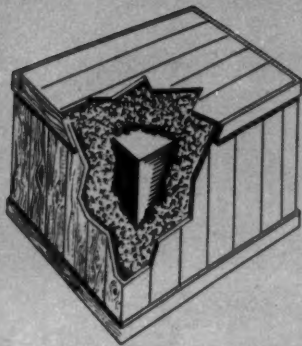
the cutaway drawing of a cushioned package in Fig. 2 comprised of three elements: the exterior shipping container, the cushioning material and the product. This package may be schematically represented as shown in Fig. 3 (A). By substituting springs for the cushioning on each side of the product, the package can be represented as in 3 (B), or for the purpose of studying the package in one direction only, all the springs may be represented as one, as in Fig. 3 (C). This standardized concept of a package simplifies the solution of the cushioning design.

The packaging engineer has also standardized on the rough handling of

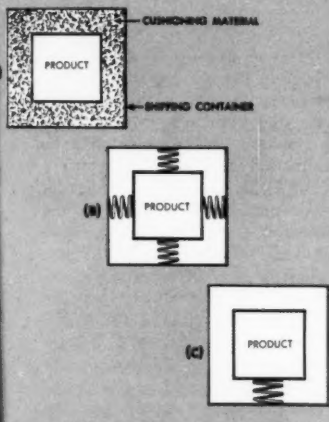
1. DISASSEMBLED test package, showing accelerometers mounted on dummy product, components of rubberized hair cushioning, steel container.



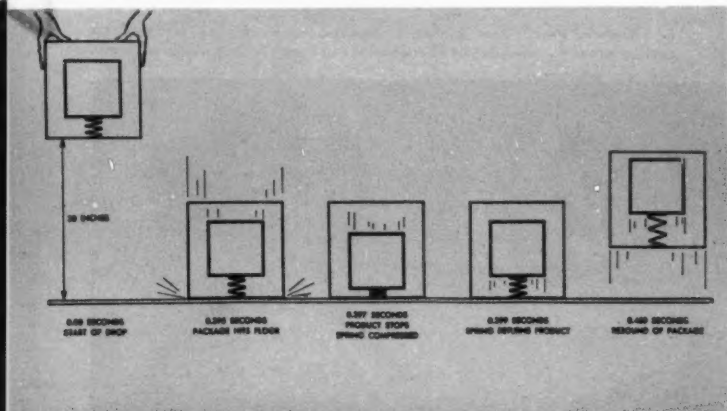
*Packaging Laboratory Director, Sponge Rubber Products Co., Shelton, Conn.



2. CUTAWAY DRAWING of a typical cushioning package, showing shipper, cushioning, product.



3. SCHEMATICS of standard package.



4. FREE FALL of standardized package, shown in various stages.

packages for test purposes by employing the "accidental" drop of 30 in., which happens to be the height of a man's hands from the floor when carrying a heavy package. When the standardized package of Fig. 3 is released, it obeys the laws of Galileo and Newton by uniformly increasing its speed of fall under the pull of gravity until it strikes whatever floor, platform or toe that intervenes at a speed dependent on the drop height (8.5 mph from 30 in.). Then, as shown in Fig. 4, the container stops but the product, moving also at 8.5 mph, pushes into the cushioning until the resistance of the compressed cushioning is equal to the force of the moving product. At this point, the product, slowed to a stop after expending its energy of motion (derived from the free fall) in compressing the cushioning, is returned to its original position by the energy stored in the compressed cushion. Under certain conditions, this stored energy exceeds the total package weight so that the rebounding product lifts the package off the floor; however, the total rebound forces never exceed the forces of the first impact.

Reviewing the package drop test from a different viewpoint, the cushion's function is to slow down (decelerate) the product in a few inches of space which is a fraction of the drop-height space originally available for the package to speed up or accelerate to its impact velocity. Since the initial acceleration was due to the force of earth's gravity, known as one "g," the deceleration or rate of slowing down

must be proportionately greater, since the space available is much less. This relation may be expressed in terms of work where the work performed in falling is the product weight multiplied by the drop height ($W \times H$) which equals the work done in compressing the cushion (cushion deflection \times deflecting force or $D \times F$). The ratio of F/W or H/D is the average deceleration expressed in units of earth's gravity, abbreviated as g's (known to physics students as 32.2 ft./sec./sec.).

G-factor

Having introduced g's as a unit of acceleration, the term G-factor should also be explained, since it is commonly used by package designers. The term G-factor was unique to the aircraft industry until recent years. To explain in a few words, a plane designed for a G-factor of 5 g's was designed to withstand forces or loads on every member equal to five times those experienced in normal flight so that a plane in a pull-out maneuver where the change in velocity or deceleration was equal to five times that of gravity or 5×32.2 ft./sec./sec. would survive undamaged. Eventually, Government specifications required aircraft components such as radios, clocks, flight instruments and other accessory gear to operate satisfactorily under these same acceleration conditions and, accordingly, G-factors were used in designing these and associated equipment.

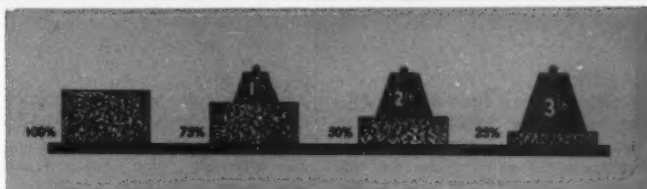
A similar condition occurs in a package free fall in that the product during its deceleration experiences the same pressure as the cushion which is resisting the downward pressure of the descending product. This load starts at zero at the time of contact, increases to a maximum when the product is stopped and returns to zero as the compressed cushioning returns the product to its original position. If the peak load is divided by the product's weight, the load is expressed in gravitational units or g's. The average load divided by the weight is similarly the average acceleration experienced during the period of the shock. The cushioning G-factor, then, would be the peak acceleration (divided by the earth's acceleration) or the peak load (divided by the product weight) which the product or its weakest component can sustain without damage. This G-factor indicating the maximum load the product will tolerate is normally much greater than that employed by

aircraft designers because the higher load lasts for only thousandths of a second where a pull-out or other maneuver may last for several seconds and, secondly, satisfactory product operation during the time of loading is not required as in flight conditions. However, the G-factor represents a convenient way for the product and package designers to express the overall strength of the product in calculating the protection required.

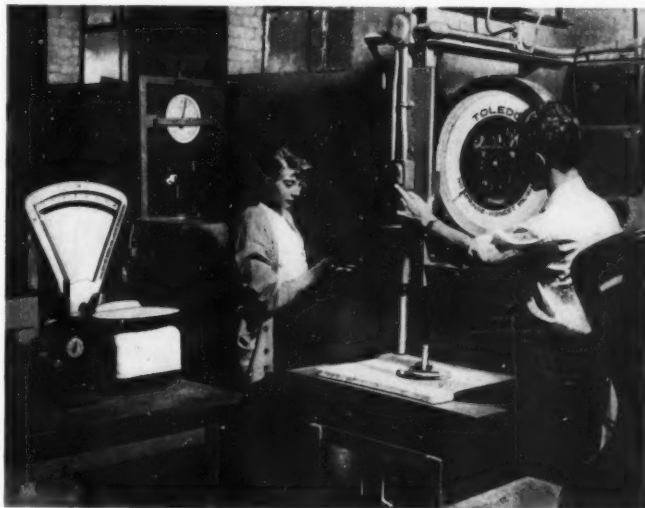
Compression

The major factor affecting the energy-storing ability of a cushioning material is its load-compression characteristics. Since these are rarely supplied by most cushioning manufacturers, the designer must obtain his own curves. This can be most easily determined by placing increasing amounts of weight on the material and measuring the change in thickness. Fig. 5 illustrates this procedure, while Fig. 6 also presents a photograph of the compression-test equipment used to obtain this information in the laboratory. The resulting thicknesses obtained under the various loads can be converted to percentages of original cushion thickness and plotted as in Fig. 7 against the weights used to compress the cushioning divided by the area of loading as pounds per square inch.

As expected, different types of materials have different characteristics. Primarily, the shape of the load-deflection curve may change, depending on how the material acts under increasing increments of loads. If it always deflects a proportionate amount in relation to the load, such as increasing from 25 to 50% when the load is doubled, the material's compression curve is said to be linear, as in Fig. 7. A spring is an excellent example of this type of material. Other typical curve shapes are presented herewith



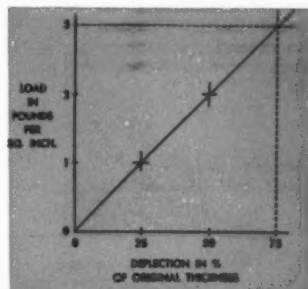
5. EFFECT of applying increasing weights on cushion.



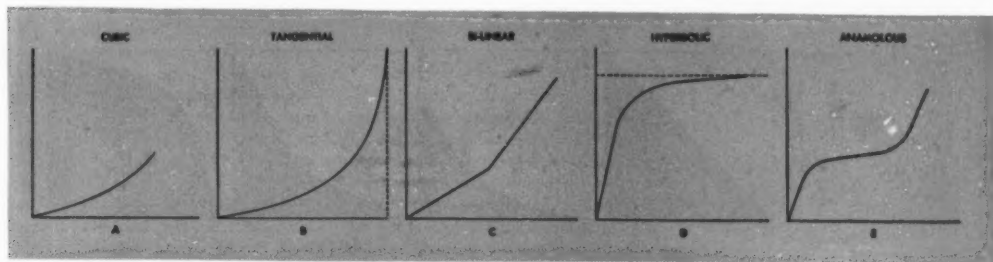
6. TESTING the compression property of foam rubber on lab compression tester.

using the classification developed by R. E. Mindlin's "Dynamics of Package Cushioning," Bell Tech. Journ., Vol. 24, pp. 353-461, July-Oct., 1945, an invaluable mathematical presentation.

Fig. 8 illustrates load-deflection curves of various types of materials. The tangential type represented in Fig. 8 (B) is the type curve for most bulk cushioning materials. This fact is plainly understood if one considers that any homogenous material which has a measurable thickness will become increasingly firm as the material



7. PLOT of results from Fig. 5.

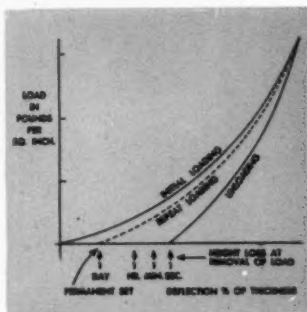


8. LOAD-DEFLECTION curves of various types of materials.

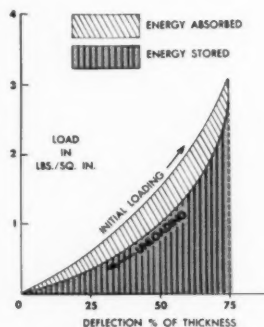
is compressed to a thickness approaching zero. Cubic cushioning in most cases is merely the initial portion of the tangential curve where the material has not been compressed to the point where its deflection would approach the zero thickness value.

Compression set

Cushioning materials must be resilient to provide continued protection



9. SET AND RECOVERY as expressed by cushion's load-deflection curve.



10. CURVE of load deflection showing energy storage vs. absorption.

against the many handlings and shocks received in transit. As most available materials are not completely elastic, the materials under continued load lose height, a condition termed "set." If the load is removed, the height will be less than its original height. Fig. 9 schematically presents the application and removal of load with the subsequent height loss. However, once the load has been removed, the material will continue to regain its height, a phenomenon termed "recovery," so that the height measurement depends on the elapsed time between load removal and measurement. Therefore, height loss is always measured at a fixed interval of time after the removal of the load. "Permanent set" is the height loss remaining after recovery has reached its end point and is due to internal damage or dislocation of the material. It is important, as set changes the dimensions of the cushioning, thereby introducing unfilled space that permits the product to move freely or rattle in the package, thus producing greater accelerations in handling and vibrations in transit. Set also changes the characteristics of the cushioning, as Fig. 9 illustrates.

Work which has been conducted at the Forest Products Laboratory, Madison, Wis., determined that the maximum set will have been introduced in the cushioning after four or more free falls. Therefore, the cushioning should be precompressed to compensate for this anticipated height loss. Of primary importance are that materials with minimum set be employed and that allowances be made for set in any cushion design.

Energy storage

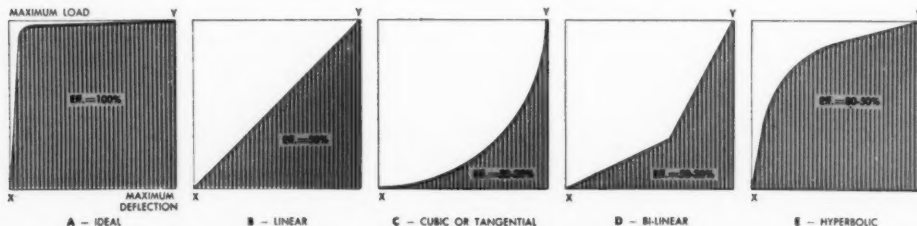
If the cushioning material were not completely elastic, when compressed by the packaged article it would not return to its original position to provide protection against further rough

handling. However, resilient or elastic materials that are not overstressed return to their original position (neglecting set) and thereby return the energy of compression to the article by pushing it upwards. When all the energy of compression is returned to the system, the moving product compresses the upper cushion and so will oscillate the cushioning for an indefinite period of time. Since actual cushioning materials are not perfectly elastic, some of the energy is converted into heat by friction or plastic deformation of the material. These forms of energy are unreturnable and this fraction of the total energy is absorbed by the cushion rather than stored. Fig. 10 graphically presents this concept in the form of a load-deflection curve where the upper curve representing the application of force to the cushion has more energy stored under it than the lower curve which represents the unloading or energy-return condition. The cross-hatched area between the two curves represents the absorbed energy which cannot be returned. For any specific material, this area probably varies with the amount of load and how rapidly it is applied, and is usually expressed mathematically by a factor called damping. The exact relation of damping factors for cushioning materials is not completely understood at this time.

Efficiency

Of equal importance is the fact that the area under the load-compression curve which represents the energy stored in the cushion will naturally vary as the shape of the curve changes between any two points; for example, points X and Y in Fig. 11.

Assuming that X and Y are zero load and the maximum load, the cushion storing the most energy will



11. EFFICIENCIES of various cushioning materials classified by load-deflection curve shapes.

be that which has a shape that contains the greatest area beneath it when loaded to its maximum at Point Y. As Fig. 11 demonstrates, the greatest area is under the rectangle shown in A, but this is not obtainable in available materials. B represents a spring that gives exactly $\frac{1}{2}$ of the maximum area possible, whereas C and D represent intermediate types of a practical shape found in common cushioning materials. Review of Fig. 11 proves the material with a hyperbolic function or curve is the closest practical one to the ideal area shown in Fig. 11 (A) and would be the most effective cushion from an energy-storing viewpoint. Furthermore, by comparing the energy-storing capacity (area under curve) of each material with its maximum possible energy at the same load and deflection, we obtain an efficiency factor where

$$\text{Eff.} = \frac{\text{area under curve}}{\text{Max. possible area}} \times 100\%$$

that can be employed to compare materials without resorting to higher mathematics. This concept is presented in tabular form in "Ride and Vibration Data" Booklet SP-6, published by the Society of Automotive Engineers in 1946, which is a collection of extremely useful tables for the package cushion designer. Hence, to compare efficiency of two or more materials, all that is necessary is to measure the area under the load-deflection curves of each material for the same load and deflection conditions expected in the drop test or rough handling.

Loading

The problem of selecting the proper stiffness cushion for an article of given weight has been neglected heretofore in this discussion. The solution is very simple.

Each face or side of the packaged article bears on the cushioning. If the cushioning is fitted and located properly, it will support the article evenly so that each square inch will receive the same load. Therefore, if the weight and the maximum acceleration are known, the maximum load will be the product of these two factors $L_{\max} = W \times G_{\max}$. By dividing the total maximum load L_{\max} by the area of the side to which the shock is applied, the load per unit area is obtained; F_{\max} (lbs. per sq. in.) = $W \times G_{\max} / \text{Area}$. Fig. 12 demonstrates this schematically. Fig. 13 shows for any

given load-deflection curve at the maximum calculated load, a certain deflection will result. Once the maximum unit load is determined, the essence of the whole design method is to keep the deflection at maximum by a proper choice of material in order to give the article more room to slow down, thereby reducing the deceleration loading applied to the article by the cushioning to a level the article can safely withstand. This latter goal can also be achieved by spreading the total load over a greater area, such as in the floating package of Fig. 14 where the article of small surface area is placed in a container of greater surface area that is, in turn, cushioned in the shipping container.

Design procedure

Once the above elements have been grasped, they can be applied to any cushioning design problem, as in the example below which must meet a 30-in. drop test.

Article: Gyroscopic instrument —

Wt. = 5.0 lbs.

G-factor = 30 g's maximum

Length = 6 in.

Diameter = 8 in. — Area of bottom = 50 sq. in.

Max. unit load:

$$F_m = W \times G_m / A = 5 \times 30 / 50 \\ = 3 \text{ lbs./sq. in.}$$

Using the load-deflection curve of Fig. 7, the deflection at 3 p.s.i. is 75% and the efficiency is 50%, as the area under the line is exactly $\frac{1}{2}$ that ideally available.

Thickness of cushioning required:

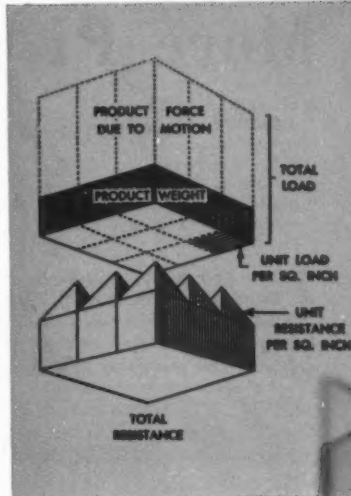
$$Th = h / G_m \times d_m \times \text{eff.}$$

$$Th = 30 / 30 \times 0.75 \times 0.5 = 2.67 \text{ in.}$$

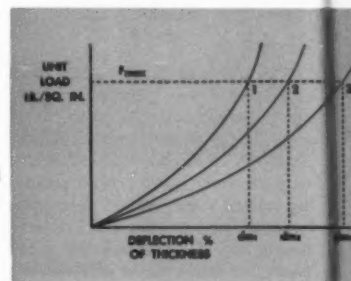
Thus, we require 2.67 in. of a cushioning material with the curve shown in Fig. 7 to prevent the product from experiencing more than 30 g's when the package is dropped on its base or top from 30 in. The same procedure applies to the side, except the area is different and so the maximum unit load will be slightly different.

Conclusion

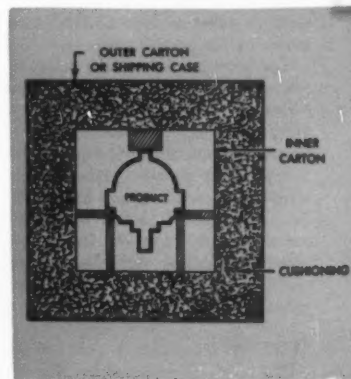
To conclude, if the designer has all the facts concerning his product and his cushioning materials, the design procedure itself is very simple. Furthermore, he can readily determine which material is the most economical by comparing it on the basis of efficiency, freedom from set and other practical factors that will ensure the product's safe delivery.



12. RELATIONSHIP of total load to the unit load, shown schematically.



13. CURVES of stiffness materials showing maximum-load deflections.



14. SECTION of a floating package.

More PI proposals

COMMITTEE INVITES DISCUSSION OF SUGGESTED METHODS

FOR TESTING ALKALI EFFECTS, LIGHT-FASTNESS AND PRODUCT RESISTANCE

Three more proposed Packaging Institute Test Procedures have been developed and released by the Printed Packaging Materials Committee of that organization and are published here for trial, discussion and criticism. The procedures offer methods of testing for: effect of alkali (PI PRINTING 1p-51), color-fastness to light (PI PRINTING 2p-51) and product resistance (PI PRINTING 3p-51). The letter "p" in the index number indicates that these methods are in the "proposed" status. After a proposed procedure has been given thorough industrial trials and criticisms have been referred to the originating committee, the procedure is restudied and possibly revised

before becoming a "tentative" and eventually a "standard" method.

Criticisms and suggestions from both members and non-members of PI are not only invited, but solicited, according to E. H. Balkema, chairman of the Printed Packaging Materials Committee. Comments should be addressed to the committee at the Packaging Institute, 342 Madison Ave., New York 17, to the attention, respectively, of the Alkali Test Subcommittee (A. H. Twardowicz, chairman), the Fade-Ometer Subcommittee (C. A. Reynolds, Jr., chairman) or the Product Resistance Subcommittee (L. K. Burnett, chairman).

Effect of alkali on printed materials (PI Printing 1p-51)

Purpose

This test is to determine the effect of alkaline materials on printed packaging materials such as paper, wrappers, labels, liners, containers, etc. Examples of alkaline materials which may adversely affect printed packaging materials are: cement, detergents, lye, soap, soap powder, etc. Such substances may cause discoloration of the packaging materials or discoloration of the printed matter because of the alkaline nature of the packaged product.

The proposed test will give an indication, at the point of use of the printed packaging materials, of the possible effect of the alkaline substance on the printed package.

The proposed Alkali Test is a spot-reaction test to produce rapidly an indication of the susceptibility of a printed package to alkaline contents or substances with which it may come in contact. It does not, however, replace the six-month storage test which, for safety, should always be carried out, even when the results of the quick Alkali Test show that the printed package is presumably safe from discoloration by alkali.

Apparatus

The apparatus required for this test is listed below:

1. Four clean graduated glass

cylinders, 5 ml. or 10 ml., graduated to ml. and tenths of ml.

2. At least four clean medicine droppers.

Chemicals

Standard stock solution of 1% NaOH (sodium hydroxide). This solution is to be diluted in small quantities as directed below (for use in the tests) by means of the graduated cylinder.

To prepare 0.5% solution, add an equal volume of water to, say, 1 ml. of the 1% NaOH solution in the graduated cylinder. Mix by shaking.

To prepare a 0.25% solution, add three volumes of water to one volume of 1% NaOH solution in the graduated cylinder. Mix by shaking.

To prepare a 0.1% solution, add nine volumes of water to one volume of 1% NaOH solution. Mix by shaking.

Prepare fresh dilutions each day.

Preparation of test specimen

- Place the material to be tested on a flat, clean surface. Mark off several areas with a lead pencil so that each area will include a portion of each kind of ink or color, and some of the unprinted paper if any of the latter is exposed.

Procedure

1. Make up either 5 or 10 ml. of 0.5%, 0.25% and 0.1% strength sodium

hydroxide, as directed under "Chemicals."

2. Mark each area with the strength of the alkali solution to be used for testing it. Apply one drop of alkali solution of the corresponding strength to each different kind of ink and to the unprinted paper. Do not spread the drop. Avoid moving the paper during the test.

3. Test each area in turn with 1%, 0.5%, 0.25% and 0.1% sodium hydroxide solution. Use a separate, clean, medicine dropper for each dilution. In order to identify the spots where drops of alkali have been placed, indicate their location by penciled arrows pointing toward the drops. Allow the paper to remain undisturbed at room temperature and humidity until the drops have dried.

Examination of tests

After the alkali drops have been allowed to dry spontaneously on the papers, observe carefully the effect of the different strengths of alkali solution on each color and on the unprinted paper. The following observations are then made:

1. Note, with respect to each strength of alkali and each color, whether the alkali has produced an undesirable or harmful change.

2. Observe also the reverse side of the paper to determine if alkali has

come through from the side on which the test was made.

3. Note also whether any of the colors have bled through from the printed side.

Report

Report, for each strength of alkali solution, either:

1. No discoloration or change of each color tested.
2. Slight discoloration or change of each color tested.
3. Pronounced discoloration or change of each color tested.

Also report:

4. Penetration of paper by alkali.
5. Bleeding of colors.

Interpretation

This Alkali Test can also be used to determine whether various protective coatings, such as vinyl lacquers, will withstand at least a 0.25% solution of sodium hydroxide. If no blistering of the coating or discoloration of the back of the wrapper occurs, then the coating is satisfactory for packaging materials.

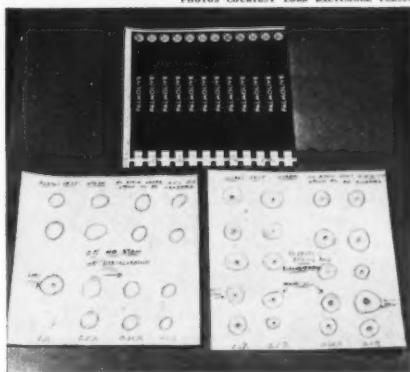
This type of test originated at Colgate-Palmolive-Peet Co. and is used extensively there. The Lord Baltimore Press also uses this test in its routine quality control.



APPARATUS and chemicals needed for the Alkali Test, including sodium hydroxide solution in different strengths—1%, 0.5%, 0.25% and 0.1%. The specimen is marked with areas to be tested and strengths of the test solutions.

PHOTOS COURTESY LORD BALTIMORE PRESS.

RESULTS of tests. No sample showing discoloration from the test solution of less than 0.5% strength is acceptable.



Test for fastness to light (PI Printing 2p-51)

Purpose

This test provides a means for evaluating and reporting the relative fastness or resistance to fading in sunlight of materials used in packaging. These include paper, paperboard, inks, lacquers, varnishes, coatings, films, etc.

Apparatus

A Fade-Ometer Model F.D.A.-R, made by Atlas Electric Devices Co., shall be used for exposure of the test specimens. This machine consists of a carbon arc enclosed in a No. 9200-PX globe or filter which shall be thoroughly cleaned after every 24 hrs. of use, operated on a direct current of approximately 12 to 14 amperes or on 60-cycle alternating current of 15 to 17 amperes with 125 to 140 volts across the arc. The voltage of the power line shall be 208 to 250 volts. The test specimens shall be revolved around the arc to insure uniformity of exposure. The distance from the arc to the center of the test specimen shall

be 10 in. The sample rack shall be completely filled with holders to insure thermal equilibrium; blanks shall be used if sufficient specimens are not available. The air around the specimens shall be humidified and its temperature shall be automatically controlled.

The relative humidity of the air in the Fade-Ometer shall be that produced by the use of the conventional wicks mounted on frames and shall not exceed 50%. Care shall be taken to keep the wicks soft and absorbent.

The temperature within the Fade-Ometer shall be controlled by the circulation of sufficient air and shall not exceed 104 deg. F. \pm 4 deg. F.

The relative humidity and temperature shall be measured in a plane perpendicular to the axis of the arc passing through the point where the two carbons meet. When fresh carbons are inserted, at the same distance from the center of the arc as the surface of the test specimens (i.e., 10 in.), the tem-

perature shall be measured with a mercury thermometer with its bulb fully exposed to radiation of the arc.

Calibration

For the purpose of calibrating to a common basis the Model F.D.A.-R Fade-Ometer, which, because of local conditions may show considerable variations in light intensities, Calibration Paper 1554 is recommended. This paper is prepared by the National Bureau of Standards and is available upon request from the Chief of Textile Section, National Bureau of Standards, Washington, D.C. The paper is in sheets 2 1/2 by 2 1/2 in., blue in color and light sensitive. It is used in conjunction with a booklet containing a series of standard exposures of identical paper. These standard exposures vary by 4-hr. steps from 16 to 32 hrs. in the Bureau's Master Fading Lamp, which is adjusted to produce in 20 hrs. exposure appreciable fading of the AATCC blue wool Light-Fastness

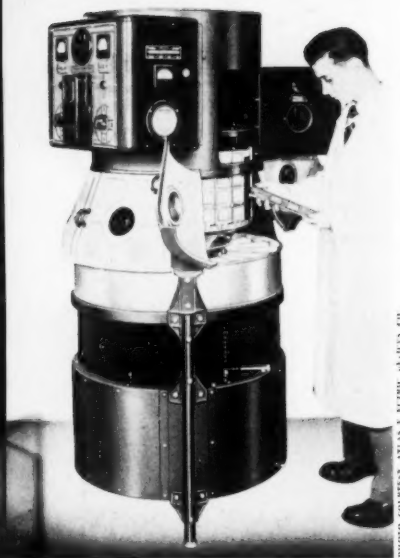


PHOTO COURTESY ATLAS ELECTRIC DEVICES CO.

FADE-OMETER apparatus for light-fastness test. Samples are mounted in strips as shown, with two squares exposed and two hidden as they rotate around carbon arc. Wet sponges in the base of unit maintain humidity.

Standard L4. Calibration paper is suitable for use in calibrating fading lamps for the time served by one trim of carbons, approximately 20 hrs. In use, a piece of Calibration Paper 1554 is placed in the lamp at the time of starting, after installing a new trim of carbons, and is allowed to remain in the lamp either during the time served by this one trim of carbons or for an accurately measured number of hours in the neighborhood of 20 hrs. The proper face of the paper must be exposed as marked and exposure conditions shall be identical with those used for the test specimens with respect to mounting. After removal from the lamp, the exposed paper is allowed to remain in a cool, dry place protected from strong light for 1 hr. or for 30 min. if it has been allowed to remain in the lamp with the arc shut off long enough to permit the globe to have cooled to room temperature. It is then compared with the standard exposures in the booklet, after trimming of the unexposed edges to facilitate accurate comparisons. The comparisons shall be made with the paper grain of the standard and control exposure placed in the same position,

preferably in a horizontal direction. The exposed parts of both the standards and controls shall not be touched by the fingers because of their sensitivity to moisture and the consequent danger of soiling.

After selection of the standard most closely approximating the exposed control paper in degree of fading, the lamp is credited with having operated for the corresponding number of standard fading hours instead of the hours it actually operated, regardless of whether they are identical or different. For example, if the Control Calibration Paper exposed for 20 hrs. agrees in degree of fading with the fading of the Standard for 24 Standard Fading Hours, all test specimens exposed simultaneously are credited with having received 24 Standard Fading Hours of exposure instead of the 20 Fade-Ometer hours they actually received.

Because any lamp may change in its fading rate from day to day, the Calibration Paper 1554 shall be used as a Control in all important testing. In comparing the exposed Control with the Standards of Fading Hours in the Master Lamp, it is possible to interpolate 2-hr. differences as midway between the 4-hr. Standards.

To prevent abnormal test results, it is recommended that Fade-Ometers be adjusted to produce not more than 24 nor less than 16 Standard Fading Hours in 20 hrs. of actual exposure. Instructions for increasing or decreasing the fading rate can be obtained from the manufacturer of the equipment, Atlas Electric Devices Co., Inc., 361 W. Superior St., Chicago, Ill.

Test specimens

Two or more specimens shall be prepared from the material to be tested. Care shall be used in selecting the specimens so that they are fully representative of the material to be tested. For example, if a material is printed with several colors in a design and a single specimen does not include all the colors in the design, additional specimens shall be prepared so that two samples of all colors are included.*

The size of each test specimen shall be consistent with the specimen holders normally used in the Fade-Ometer, size 2½ by 3 in. A piece of the original sample shall be saved for comparison with the tested specimens.

* See Packaging Institute Test Procedure, PI PAPER It-49, entitled "Sampling Paper for Testing."

Procedure

Each specimen shall be placed between opaque covers that will shield it from light except for an area of about 1½ by 2 in., which shall be open to the air on both sides. The specimen so mounted shall be exposed in the apparatus described above for periods of 1, 2½, 5, 10, 20, 40, 80, 160 or 230 Standard Fading Hours, depending upon its fastness. The longest period of exposure it will withstand without an "appreciable" change in color shall be determined. The results of preliminary observations, made when the specimen is removed momentarily from the apparatus, shall be confirmed after the specimen has been allowed to lie in the dark at room temperature for at least 2 hrs.

In examining the results of tests, the exposed portion shall be cut out inside of the line left by the edge of the aperture in the specimen holder and the exposed portion shall then be mounted on a similar portion of the original untested sample. The interpretation of appreciable change shall be determined by that comparison. In the above, "appreciable" change in color shall be understood to mean a change that is immediately noticeable in comparing the tested sample with the original under diffused daylight, either standard artificial daylight or light from a northern sky at an angle of approximately 45 deg.

Reporting

Class 0. Materials which show an appreciable change in color after being subjected to exposure for 1 Standard Fading Hour.

Class 1. Materials which show no appreciable change in color after exposure for 1 Standard Fading Hour, but show an appreciable change after 2½ Standard Fading Hours.

Class 2. Materials which show no appreciable change in color after exposure for 2½ Standard Fading Hours, but show an appreciable change after 5 Standard Fading Hours.

Class 3. Materials which show no appreciable change in color after exposure for 5 Standard Fading Hours, but show an appreciable change after 10 Standard Fading Hours.

Class 4. Materials which show no appreciable change in color after exposure for 10 Standard Fading Hours, but show an appreciable change after 20 Standard Fading Hours.

Class 5. Materials which show no

AVERAGE DAYS* WASHINGTON D. C. SEA LEVEL—LATITUDE 39° N.

Fade-Ometer Exposure Hours Column 1		June July August Column 2	September April May Column 3	October November March Column 4	December January February Column 5
1	Fade-Ometer hr. equals	0.42 days	1.26 days	2.5 days	7.5 days
2.33	" " " "	1.0 "	3.0 "	6.0 "	18.0 "
6	" " " "	2.5 "	7.5 "	15.0 "	45.0 "
12	" " " "	5.0 "	15.0 "	30.0 "	90.0 "
24	" " " "	10.0 "	30.0 "	60.0 "	180.0 "
48	" " " "	20.0 "	60.0 "	120.0 "	360.0 "
96	" " " "	40.0 "	120.0 "	240.0 "	720.0 "
144	" " " "	60.0 "	180.0 "	360.0 "	1080.0 "

* 6 sunlight hrs. (9 a.m. to 3 p.m.) is considered one day.

appreciable change in color after exposure for 20 Standard Fading Hours, but show an appreciable change after 40 Standard Fading Hours.

Class 6. Materials which show no appreciable change in color after exposure for 40 Standard Fading Hours, but show an appreciable change after 80 Standard Fading Hours.

Class 7. Materials which show no appreciable change in color after exposure for 80 Standard Fading Hours, but show an appreciable change after 160 Standard Fading Hours.

Class 8. Materials which show no appreciable change in color after exposure for 160 Standard Fading Hours shall be reported as having

Product-resistance test (PI Printing 3p-51)

Scope and purpose

This method is designed to evaluate the resistance of the ink on printed packaging materials to the product being packed. Since flat sections can be taken from some packaging materials while others must be tested in their original rigid form, provision is made for testing either type of sample. Since products may come in contact with the ink on the packaging materials in either solid, liquid, paste, water mixture or solution form, the testing method provides means of testing with products of these various types.

Apparatus and materials

1. Product to be packaged.
2. Sheets of unsized, unbleached muslin, 4 by 16 in. folded to 4 by 4 in.
3. Test weights, 3 in. square in surface area, weighing 12 oz. each and conforming to the contour of surface to be tested.
4. Suitable vessel for making up solution or mixture where the product is normally used in a mixture or solution.
5. Distilled water.
6. Cabinet in which humidity can be controlled at 85 to 95% relative humidity or bell jar and beaker.
7. Flat testing surface, such as glass or hardwood.

8. Scotch tape and/or rubber bands.

Test specimens

Where possible, cut a flat section or sections 3 by 3 in. from the printed packaging material to be tested so that all colors are available for test. When dealing with rigid packages from which it is not possible to cut flat sections (example: a printed ampoule or bottle), the packages can be used in their rigid form. A sufficient

"Class 8 ————" (No. of Standard Fading Hours).

Sunlight equivalents

The chart at the left based on data determined by the National Bureau of Standards is useful for roughly judging the fastness to sunlight of paper and printing inks that have been tested in a Fade-Ometer.

Acknowledgments

The Fade-Ometer Subcommittee of the Printed Packaging Materials Committee gratefully acknowledges contributions to the Proposed Fade-Ometer Test Procedure by the following:

1. American Assn. of Textile Chemists and Colorists.
2. American Society for Testing Materials.
3. National Bureau of Standards.
4. Mr. J. E. Norton, Director, Research and Development, Atlas Electric Devices Co.

number of packages should be used so that all colors are available for test.

In all cases, the ink must be dry and the sample for test shall have been printed longer than 72 hrs.

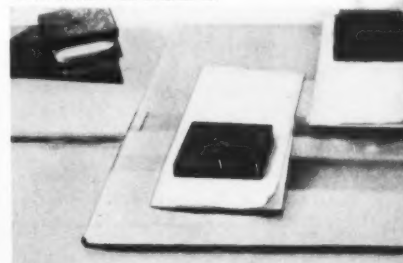
Procedure

- (I-A) If the product is a solid:
(a) Cut a fresh sample, approximately 3 by 3 by 1 in. and then slice this fresh sample into two slices, approximately 3 by 3 by ½ in.
(This article continued on page 188)

PRODUCT TEST being carried out as in (I-B) of method, with a granular or powdered product.



PHOTOS COURTESY OHIO ROYBOARD CO.



ILLUSTRATING, at left, sample being tested with a solid product as in (I-A); center, sample being tested with a product used as a water solution as in (I-C); and at the right, a sample opened for inspection of test result.



Questions & Answers



This consultation service on packaging subjects is at your command. Simply address your questions to Technical Editor, Modern Packaging, 575 Madison Ave., New York 22, N. Y. Your name or other identification will not appear with any published answer.

Preventing can rust

QUESTION: *We have a problem concerning the shipment of condensed milk in metal cans to tropical and subtropical countries. Generally, these labeled cans are packed in a wooden case and after a short period of tropical exposure the cans rust and have a very unattractive appearance.*

We have tried to avoid this rusting of cans by the use of asphalt paper liners in the wooden case and this is helpful until the cans are unpacked. We would like to know the kinds of coatings that are available and the special machinery required to apply a coating to the exterior surface of the metal can before applying the label. We would appreciate your advice on this matter.

ANSWER: The rusting of metal cans under tropical conditions or in extended storage is an old problem for the packers of many products. This problem has probably become more acute since the amount of tin used in the surface coating of cans has been reduced by the metal shortage. As you have found out, the use of a properly constructed and tightly closed waterproof case liner is of great benefit until the case is opened. However, the only satisfactory solution is to have an exterior protective coating, such as lacquer, applied to the cans. This can be done in two ways.

The first method is to apply the coating to the exterior side of the

metal sheets before they are fabricated into cans. But this method has a disadvantage in that the coating will undergo abrasion in fabrication and would probably be particularly difficult for use, since most milk cans have soldered closures and seams.

The other method is to apply an exterior coating to the fabricated cans after they have been filled. This requires a special type of coating and special machines, but it does result in a continuous coating which can give good rust prevention.

It is suggested that you contact several of the companies supplying machinery in the can field and they will give you details on the machines and the process for applying such a coating.

Oilproof liner for fibre cans

QUESTION: *We are developing a new product and we are concerned about the problem of properly packaging it. This product is used in industrial factory maintenance and is a dense plastic mass with a high oil content. We would like to package this in round fibre cans, but have not found any means to prevent oil staining after exposure to summer temperatures.*

Can you suggest to us a durable and completely oilproof liner for this type of package for our product?

ANSWER: Apparently you have decided that a round fibre can is the most desirable package for your product.

Since this decision already has been made, the best answer to your problem would be to use seamless transparent tubing made from regenerated cellulose. Such tubes are made by several manufacturers and are characterized by being extremely strong and completely resistant to penetration by oils. The top and bottom closures can be made by use of

clamped-on seals, or by bunching and tying the ends.

You might also try seamless tubing made from plastic materials, such as vinyl resins, since certain formulations of this type can be successful, depending upon the particular oil used in your product. Plastic seamless tubing has the advantage of being heat sealable. However, neither the cellulose film nor the vinyl-type film would give any protection from the pick-up of moisture if your product happens to be hygroscopic.

Frozen sliced liver package

QUESTION: *We are interested in finding a method of packaging frozen sliced-beef livers to give a neat contour fitting package. The package should give protection against freezer burn, should not compress the liver too greatly and should be sufficiently durable to withstand handling at low temperature. So far, every package we have tried has been unsightly because it did not fit the irregularly shaped product. Any suggestions that you might be able to offer us will be very much appreciated.*

ANSWER: Your problem is particularly difficult because the liver slices are oval in shape and most packages cannot be made to conform with such an irregular object.

It is suggested, however, that you try the use of heavy waxed board which has been die cut into an oval shape. The liver is placed on this base and the assembly slipped into a Cryo-Vac bag. The end of this bag is turned under the base, heat sealed and the whole assembly is given a blast of warm air to shrink the bag.

The result should be a conforming wrapper which would hold the liver in place on the base and which would give visibility and protection against freezer burn and which would have durability at low temperatures.

CORRECTION

We regret a typographical error in the caption of Fig. 4 in the article "Evaluation of Waxed-Paper Seals" by Padgett, Yermakoff and Van Esselstyn in our February issue (p. 123). The caption should state that the wax used in this particular test had a melting point of 132 deg. F., not 32.

Step up your pick-up sales with **CEL-O-SEAL**

REG. U. S. PAT. OFF.

Add eye-catching sparkle

In today's highly competitive market, the eye-appeal of your package is tremendously important . . . surveys in supermarkets show that 66% of all food purchases are decided in the store!

That's why so many progressive manufacturers use Du Pont "Cel-O-Seal" bands to add the extra sales punch right at the *point of decision*. You too will find that these colorful, sparkling bands are shopper-stoppers that help your product *sell itself*.

Give assurance of protected quality

"Cel-O-Seal" bands do a second, delayed-action selling job for you at the *point of use*. They remind the user of the precaution you take to seal in the quality of your product . . . they can give sharp display to your brand name and slogan . . . invite repeat business.

Find out what "Cel-O-Seal" can do for your product and your sales. Just send us a labeled sample of your package. We'll band it, make recommendations, return it for your inspection. No obligation, of course. Address: "Cel-O-Seal" Division, E. I. du Pont de Nemours & Co. (Inc.), 9529-F Nemours Bldg., Wilmington 98, Delaware. "Cel-O-Seal" cellulose bands are also sold by Armstrong Cork Co., Lancaster, Pa., and I. F. Schnier Co., San Francisco, Cal.



"CEL-O-SEAL" PROTECTS against leakage, keeps tight closures tight.



"CEL-O-SEAL" PROTECTS against contamination, assures product purity.



"CEL-O-SEAL" PROTECTS against tampering, creates customer confidence.



150th Anniversary

BETTER THINGS FOR BETTER LIVING... THROUGH CHEMISTRY

DU PONT "CEL-O-SEAL" BANDS

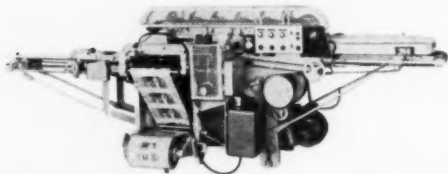
APRIL 1952

139

Equipment and materials

A HIGH-SPEED FROZEN-FOOD WRAPPER.

The Model 51, announced by the Battle Creek Wrapping Machine Co., Battle Creek, Mich., is designed for wrapping retail sizes of frozen-food packages at speeds of more than 150 units a minute. An advantage claimed is the machine's output rate,



which permits increased speeds throughout the production line. The machine, it is claimed, will create uniformly tight, pressure-recessed and sealed folds in the recessed ends of "Canco" packages, thus preventing punched or loosened ends. The machine has an automatic-belt intake and carton separator, automatic paper feed, automatic self-clearing take-away sealing pads and electric-eye controls for registering printed designs on cartons and "Canco" packages. Only intermittent services of an attendant are required, it is claimed, to change sizes or reload paper. It handles all latest wrapping materials.

ADHESIVE FOR SILICONED SURFACES

is offered by Polymer Industries, Inc., Astoria, N. Y. The adhesive is called "Glas-Weld" and is said to handle well in high-speed gluing machines. The new product is said to have filled a special need in the pharmaceutical packaging field, where silicone treatment is being used to provide drain-free glass surfaces. Silicone-coated paper, wood, ceramics and metals have also been successfully adhered with this new line of adhesives, it is said. The product is also reported to be useful in overcoming hard-to-label problems caused by difficult surfaces other than those employing a silicone releasing agent.

A NEW FILLING SCALE

that net weighs to an accuracy of 1/10 lb. and bags bulk materials completely automatically is produced by the Thayer Scale & Engineering Corp., E. Water St., Rockland, Mass. Called the model 400N, its speed is up to 12 per minute for 50-lb. bags and 10 per minute for 100-lb. bags. The filler is equipped with a

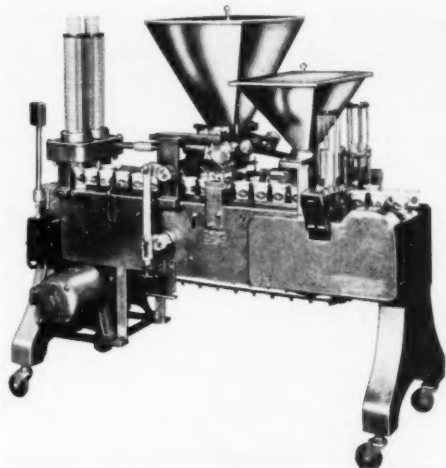


self-gripping bag holder, an automatic net-weighing hopper, a supply tube whose opening may be varied up to 72 sq. in., an air-operated feeding gate and an automatic check-weighing and bag-releasing system. An exclusive shockproof leverage scale operates without the use of wear-vulnerable knife-edge pivots, it is claimed, making possible close weight tolerances. The wide load-weight range and accuracy of the unit, it is said, make the filler extremely useful for automatic batch weighing. A feeding system that utilizes both gravity and vibration, combined with special con-

trol design, makes it possible to load any free-flowing material with packing, aerating, separating, etc., it is claimed. An adjustable floodproof feeding gate partially closes when the hopper is filled to about 95% of the predetermined weight. The material is then dribble-fed by vibration to 100% of desired weight. The entire feeding system is stainless steel; movable shafts and cams are mounted in grease-packed and double-sealed ball bearings. Mechanical parts, electric controls and scale levers are enclosed in dustproof housings. Dimensions are 2 by 4 by 6 ft. high. Duplex units are also available.

A NEW PACKAGING MACHINE

capable of filling 500 dozen ice-cream cups per hour is introduced by the Bagby Div. of the Triangle Package Machinery Co., 55 W. Diversey Ave., Chicago. Called the Model M-100, it is a completely automatic, twin-line machine, built to fill 3-oz.



cups and others up to 3/4 and 1 pt., as well as sundae cups, dishes and tarts. Features claimed are accurate bottom-up filling, instant adjustment for all container sizes, stainless steel or nickel alloy parts, quick disassembly for easy cleaning and no cup-no fill operation.

A HIGH-SPEED PACKAGING MACHINE

that makes, fills and seals unit, bag-type packages at an output rate up to 180 packages a minute is announced by the Bartelt Engineering Co., Rockford, Ill. Package sizes handled are 2 by 2 in. to 3 by 3 in. The machines are adaptable to most powdered and liquid products and a number of "hard-goods" products of small size. Machines are fitted with fillers and sequences of operation best suited to customer's needs. The machine employs twin hoppers and a double forming and filling system to achieve its speedy output rate. The operational sequence is such that a large bag moves in vertically and is formed in a single unit. The bottom half is filled from the first hopper and a sealing iron moves in effecting a seal half way up the bag. The top half is then filled from the second hopper and a top seal is made. After the top seal is completed, cutting knives shear the bags apart at the middle seal and two completed packages are discharged at



Merchandise
Courtesy Haynes Griffin Music Stores.

*M*akes good merchandise
sell better . . . Kodapak Sheet
"Kodapak" is a trade-mark

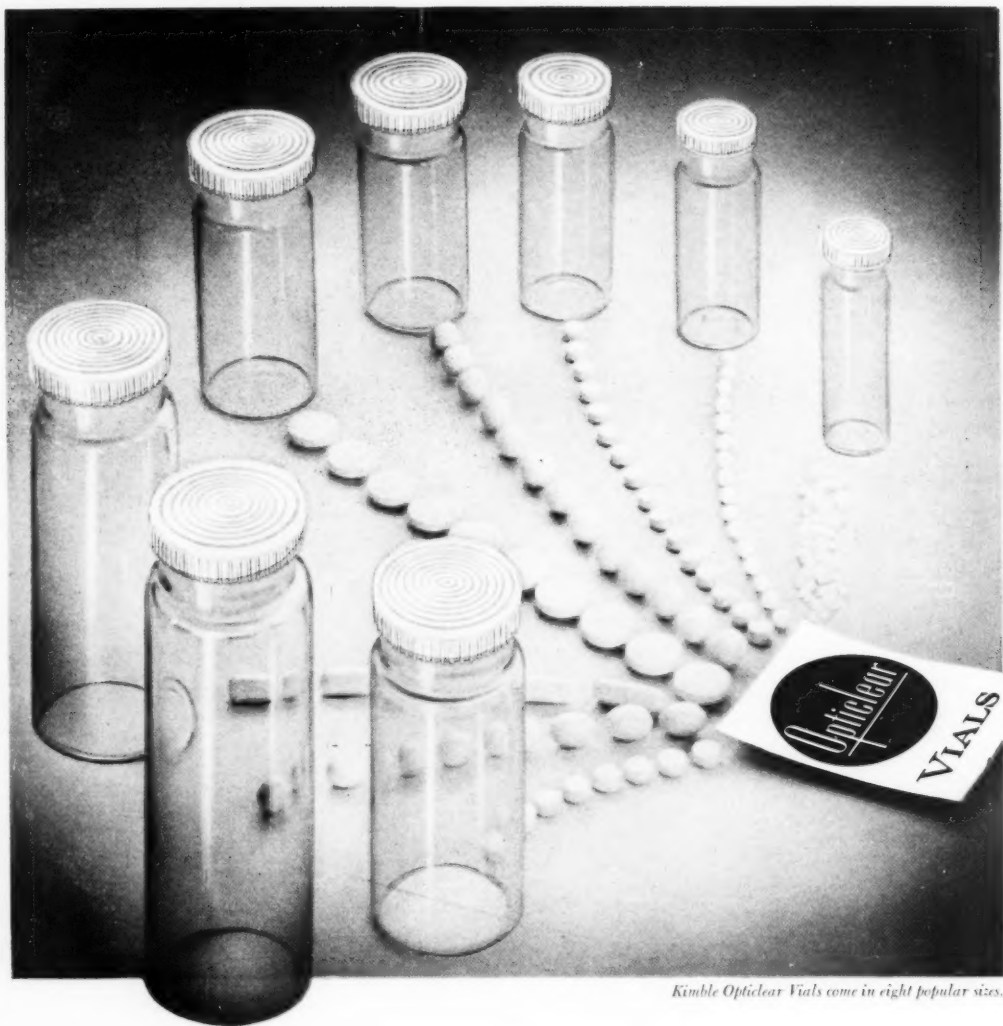
LOOK AT THEM . . . Here are phonograph records—all sizes—prepackaged in envelopes or cases of tough, brilliant, crystal-clear Kodapak Sheet.

What a sound merchandising idea. Customers handle to heart's content—look before they listen; jackets stay fresh, clean, free of finger marks—salable longer.

For further information, please consult your local representative or write:

Cellulose Products Division
Eastman Kodak Company, Rochester 4, N.Y.

Sales offices in New York, Chicago, Dallas. Pacific Coast distributor: Wilson & Geo. Meyer & Co., San Francisco, Los Angeles, Portland, Seattle. Canadian distributor: Paper Sales Limited, Toronto, Montreal.



Kimble Opticlear Vials come in eight popular sizes.

LEADERSHIP is our business

THE ORIGINAL MEANING of business is being busy. Kimble keeps busy maintaining its traditional leadership in the quality of the types of glass products it produces. Users of such products have

shown their approval of Kimble policies by making Kimble the leader in volume as it is in quality.

Kimble Opticlear Vials are an example. They were designed to offer the utmost in protection of

dry products that must be kept dry. They have swiftly assumed leadership in the vial field. If you are looking for a container to help you attain or maintain leadership for a product of yours, consult Kimble.

Kimble Makes Glass Serve You

KIMBLE GLASS TOLEDO 1, OHIO
Division of Owens-Illinois Glass Company



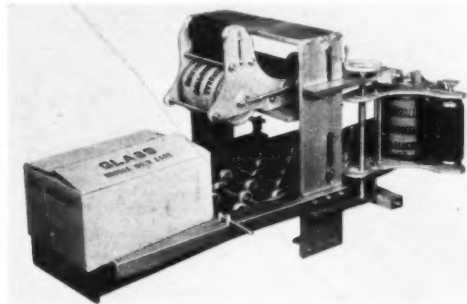
MODERN PACKAGING

Equipment and materials

the end of the machine. The machine can be converted to single filling when desired, providing minimum package size of 2 by 2 in. to a maximum of 4½ by 6½ in. at speeds up to 70 a minute.

TWO NEW MARKING MACHINES

are announced by the Industrial Marking Equipment Co., Inc., 454 Baltic St., Brooklyn. One, a box-printing machine, marks filled corrugated or fibre containers and can be set into the regular packaging line. It uses interchangeable rubber type or



mat and a quick-drying, non-caking ink. Make-ready is not required and ink rollers do not require cleaning. Side rails are adjustable to take various sizes of containers. Spring-loaded pressure rollers compensate for variations in container thickness. An indexing arm or drum centers the impression and the drums provide space for multiple marking to identify contents, date of packing or to address the containers.

The other machine is a new bag-marking unit for numbering and imprinting the top and bottom of multiwall bags. The unit is air operated by a foot-trip microswitch. It can be mounted in a horizontal or vertical position, is electrically controlled and has a self-inking mechanism. The length of imprint can be as much as 12 in. The printing characters come in ½-, ¾- and 1-in. heights. The operator has both hands free to pre-position the bag for in-printing. The operation consists of placing the bag between the printing die face and the printing plate and actuating the switch. The machine then goes through the complete printing cycle. A control can be supplied that will permit the bag itself to actuate a microswitch.

A NEW STEEL SHIPPING CONTAINER

for oils or blended mixtures is being produced by Geuder, Paeschke & Frey Co., Milwaukee, Wis. Available in 2-, 2½-, 3- and 5-gal. sizes, the containers become valuable re-use utility cans for owners of outboard motors, power lawn mowers, farm machinery, etc. The can features an 8-in. flexible hose spout that is removable and can be clipped on the top of the container for safekeeping. A self-contained graduated measuring cup, riveted to the under side of the filler opening cap, is another convenience. The packager may have the



NOW! Dependable **PAMARCO** quality in CYLINDERS FOR EVERY PURPOSE

FEATURING—

**Precision Quality
Fast Delivery
Complete Engineering
Service**

— ONE RELIABLE SOURCE
FOR ALL CYLINDER REQUIREMENTS

When you need cylinders — plate, rotogravure, rubber covered or plain steel — Pamarco engineering and production experience in all phases of printing and packaging systems can guarantee highest possible performance, long service and lower costs. The next time you need cylinders, call Pamarco — you'll like the way your order is handled!



**NO-FLEX
GUARANTEED
CYLINDERS**

*for better
ANILINE
printing*

Unconditionally
Guaranteed for Severe Service

New No-flex cylinders can't flex or whip — assure perfect impressions on every run. Exclusive Pamarco tube construction reduces weight — has proven stronger than solid steel by actual tests. All cylinders ground finished to exact specifications and fully inspected before shipment. For faster service, lower costs and better printing, call Pamarco.

**ROTOGRAVURE
CYLINDERS**

Pamarco supplies accurate core or base cylinders especially designed for use in rotogravure process reproduction work. All Pamarco Rotogravure Cylinders provide long service in continuous production and can be engineered to special needs.

**RUBBER
COVERED
ROLLERS**

Pamarco cores for rubber covered rollers have a reputation for quality based on fine performance in countless applications in a diversified list of industries. Whatever your operation — count on Pamarco dependability, increased efficiency.

**PLAIN
STEEL
ROLLS**

Pamarco plain steel rolls for every purpose are precision ground and finished to closest tolerances, as specified. Any size or shape can be produced quickly to meet your installation schedule. Send blueprints for prompt estimates without obligation.

CALL NOW FOR FAST, COMPETENT SERVICE!

PAMARCO
ANILINE PRINTING PRESSES
EVENFLO ENGRAVED ROLLERS
PAPER CONVERTING MACHINERY
NO-FLEX PLATE ROLLS

PAPER MACHINERY & RESEARCH • INC
1014 OAK STREET • ROSELIE, NEW JERSEY



**package
your products
the multi-saving
Peters way!**

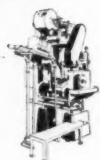
You save space . . . manpower . . . time . . . money when you package the Peters Way . . . in open-top cartons—automatically handled through Peters forming and lining and Peters folding and closing machines.

The Peters line of packaging equipment is as complete as its machines are versatile. There are machines to fit your exact requirements, determined by your production capacity, packaging schedule—and your budget.

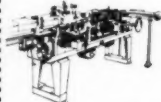
To obtain the multi-savings benefits of the Peters-way, simply write or phone. Or, send carton samples for specific recommendations.



MACHINERY CO.
4712 Ravenswood Avenue
Chicago 40, Illinois



Senior Forming and Lining Machine



Senior Folding and Closing Machine



Junior Folding and Closing Machine



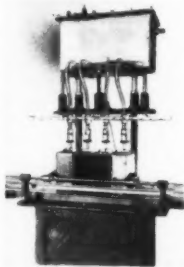
Junior Forming and Lining Machine

Equipment and materials

cans lithographed with his own design. The cans are said to be the first of their type made available as a steel shipping container.

A NEW LIQUID FILLING MACHINE

with an adjustable-height supply tank and designed to keep pressure on foamy products to a minimum is manufactured by the Perl Machine Mfg. Co., 68 Jay St., Brooklyn. A float valve built into the supply tank controls liquid level. Universal automatic filling valves permit filling by gravity, vacuum or pressure, and special micrometer adjustments on the valves guarantee accurate filling, it is said. The machine's automatic bottom shutoff on the valves and special packing screw to prevent air from penetrating between the two slicing tubings of the valves make dripless filling certain under all conditions, it is claimed.



NEW GLASS-MARKING METHODS

are announced by the Markem Machine Co., Keene, N. H., for marking ampoules, bottles, tubes, cartridges, vials and other cylindrical glass containers. For average single-use requirements, such as identification of one-dose ampoules, an improved fast-drying ink permits marking and packing at high output rates, it is claimed. For multiple use or to withstand refrigeration, a treating process to produce more durable imprints has been developed. For permanent marking that will withstand sterilizing compounds and steam sterilization, a process employing an electric furnace is offered. The new processes may be used with present Markem machines, Models PAM and 20A.

A NEW TAPE DISPENSER

for pressure-sensitive tape is offered by Minnesota Mining & Mfg. Co., St. Paul, Minn. It is trade-named "Scotch" brand definite-length dispenser Model 92 and is designed to dispense predetermined lengths of cellophane or acetate fibre tape at the touch of a hand lever. Strips from 1- to 4-in. in length and 1-in. in width are dispensed; longer lengths can be had simply by depressing the lever repeatedly.

The dispenser weighs 6 lbs., is portable, manually operated and can be reloaded with a 2,592-in. roll of tape in a matter of seconds.



A NEW FLEXIBLE CUSHIONING PAD

has been developed by Fibreco Illinois Corp., Chicago. It is called "Fibro-Pad" and is intended to cushion against shock and pressure and shield against water, grease, scratching and rubbing. The material is constructed with layers of chemically neutral wrinkled chip, encased in an outer wrap. A choice of three wrap materials is offered: Grade A, greaseproof, non-corrosive to meet JAN-B-121; waterproof asphalt-laminated for use under JAN-P-125; and chemically pure non-corrosive creped kraft for the requirements of MIL-B-130A. A heavy-duty dry kraft wrap can be supplied for commercial packaging use. The cushioning material is available in a wide variety of sizes and in standard thicknesses of $\frac{1}{8}$, $\frac{1}{4}$ and $\frac{1}{2}$ in. and up to 4 in. on special order.

Plastic

PACKAGING "KNOW-HOW"

FOR EVERY PURPOSE

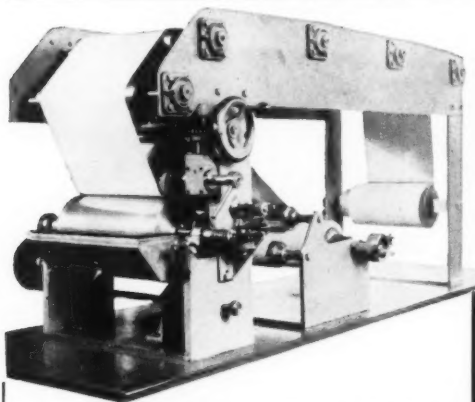
Whether your packaging needs are for civilian goods or highly specialized Army, Navy, and Air Force requirements, GILBERT PLASTICS has the facilities, skill, and experience necessary from the planning and designing stage . . . tooling . . . manufacturing . . . assembling . . . to the finished product.

May we have your requirements and specifications for prompt quotation.



GILBERT PLASTICS, INC.

1415 Chestnut Ave., Hillside 5, N. J.



PROOF PRESSES

For the Laboratory or the Ink Room. To test rotogravure inks, lacquers, heatseal materials and laminants. Special attachments may be added.



INTA-ROTO MACHINE CO., INC.

Byrd Airport, R.F.D. 6
Richmond, Virginia

For packaging
that will
open purses



employ the Magic of

Rayco Flock



Write for sources of Rayco Flock-coated velour papers, standard and Day-Glo shades. DESCRIPTIVE CIRCULAR AVAILABLE.

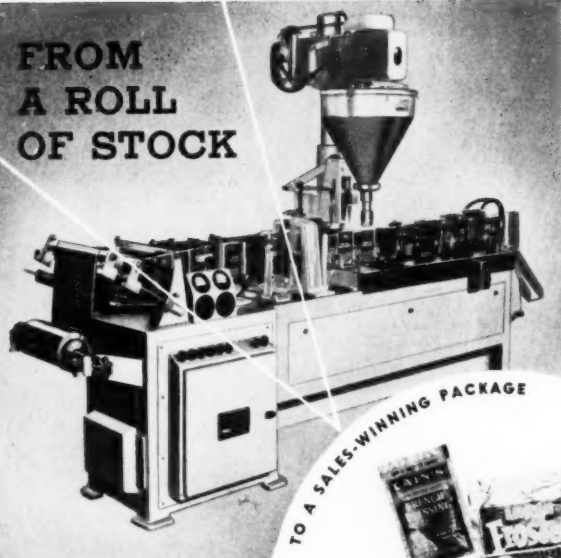
Rayon Processing
Co. of R. I., Inc.

**PIONEER PRODUCERS OF
SURFACE-COATING FLOCKS**

110 Moshassuck St.

Pawtucket, R. I.

**FROM
A ROLL
OF STOCK**



**Makes bag ...
Fills ... Seals ...!**

Here is the cost saving, streamlined way to package your product for maximum economy and plus sales!

Base machine makes a pouch style bag, opens it for filling, seals it, and discharges a completed package. Design allows for selection of the best filling equipment available for your product. Special feeders for unusual items. Standard unit makes bags from heat sealing papers, foils, cellophane, laminations, etc.

Whether your product is liquid, powder, solid, multiple items, or requires packaging under nitrogen gas, the Bartelt Machine will handle your needs.

Write for Details Today

TO A SALES-WINNING PACKAGE



BARTELT

ENGINEERING COMPANY, ROCKFORD, ILLINOIS

BOTTLES, JARS, CANS, CONTAINERS
Get a Smooth Ride
**ON THE SANITARY
Styl-O-Matic CONVEYOR**



**NO SPILLAGE
NO BREAKAGE**

They ride "like a dream" on the smooth table-top surface of the 2815 Rex Chain... with no rough or high spots to cause spilling or breaking. And there are no "pockets" to encourage bacteria growth! Available in steel or stainless steel in any length and three standard widths. Sturdily built for years of trouble-free use. Easily installed and serviced.

Carries your products safely and smoothly in a single file through various stages of your production line, such as filling, capping, labelling, etc.

FREE!

MAIL THIS COUPON FOR FULL DETAILS

ISLAND EQUIPMENT CORP.
27-01 Bridge Plaza North
Long Island City 1, N. Y.

Dept. MP4

Sounds interesting. Send me full details on your No. 815 Bottle Conveyor and a copy of your Styl-O-Matic Catalog.

COMPANY.....

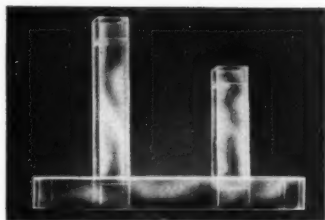
NAME.....

ADDRESS.....

CITY.....

STATE.....

have you tried



**the "Bright" transparent
seamless carton?**

IT OFFERS lower cost rigid plastic packaging with complete visibility. Ships and stores flat or set up. There is no glue seam to impede the view of your product.

For specific information to fit your packaging job, write or phone TROTH • BRIGHT • PAGE, INC., Paoli, Pa. Phone: Paoli 2149-J.

**Shout it from
the Housetops...**



with
**Crocker
DAY-GLO®
Coated
Papers**

If your advertising has been whispering when it should shout—
if your packages have been gathering dust instead of dollars
—give them *power* with Crocker DAY-GLO Coated Papers.
Dress them up with eye-catching, customer-stopping, sales-
building super-bright Crocker DAY-GLO Coated Papers—in
the colors that just won't let a buyer's eye go by.

Crocker DAY-GLO Daylight Fluorescent Papers—the
Brightest Papers in the World—will make every phase of a
good campaign look *better*. They'll make your advertising
reach out and grab prospects—make your displays say "stop
and shop"—and make your packages stand up and say
"take me home".

From coast to coast—there are Crocker DAY-GLO paper
merchants ready to serve you—ready to show you samples—
ready to help you with promotion or packaging problems.

Be Bright—use DAY-GLO®

CROCKER, BURBANK PAPERS
INCORPORATED
FITCHBURG • MASSACHUSETTS



SWITZER BROTHERS, INC.

4732 ST. CLAIR AVENUE
CLEVELAND 3, OHIO

Plants and people

The American Can Co. has announced the creation of a new Packaging Development Division in the General Sales Department, designed to step up the company's program for developing new containers and new uses for existing ones. The new division will serve as a coordinating agency between sales, manufacturing, research and other company departments. Particular interest of the new division will be centered on the develop-



Mr. Brennan

ment of containers under Canco's "Operation Survival" program, a long-range research project which seeks perfection of containers made entirely from materials available on the North American continent. Operation of the new packaging division will be under the supervision of **T. F. Brennan**, who has been named manager. Mr. Brennan has been associated with American Can during his entire business life.

L. W. Graaskamp, vice president of American Can's executive department, has been elected to the company's board of directors.

The resignation of **Walton D. Lynch** as president of the **National Folding Box Co., Inc.**, New Haven, Conn., to become chairman of the board, and the election of **Frederick S. Symington**, previously executive vice president and general manager, as president of the company were announced following the annual meeting of company stockholders. Other executive changes include the election of **Wilfred C. Palmer** as executive vice president in charge of sales and director; **W. R. Compton**, comptroller; **F. E. Endriss**, treasurer and director; **James MacIntyre**, formerly financial assistant to the president, assistant treasurer. The following officers and directors were re-elected: **C. P. Jeppesen**, vice president in charge of production and director; **David W. Mabey**, vice president and director; **J. C. LaGrue**, vice president; **D. H. Nugent**, secretary and director; **H. L. Walton**, **R. L. Walton** and **D. Walter Mabey**, directors. **Frederick C. Sims**, treasurer and director, has retired after 28 years of continuous service with National.

W. E. Gamron has been named to head up a new sales department of **Shellmar Products Corp.**, Mt. Vernon, Ohio, converter of flexible packaging materials. Mr. Gamron, who was with Union Bag & Paper Corp. for 12 years, will direct sales of Shellmar products, especially standard-

sized transparent bags, through jobbers and other distributors. All sales of other stock Shellmar items will also come under the new department, which is under the general direction of **R. L. Lee**, vice president and general sales manager.

The appointment of **Wallace A. Doepel** as assistant sales manager has been announced by the **Arthur Colton Co., Division Snyder Tool & Engineering Co.**, Detroit. Mr. Doepel's former associations were with the Firestone Tire & Rubber Co., Thompson Products, Inc., and the Lynch Corp. Mr. Doepel will make his headquarters at the Colton home offices in Detroit.

Mr. Doepel

On or before May 1, **F. H. Noble & Co.** will move their Chicago office and display room into new and larger quarters in the Heyworth Bldg., 29 E. Madison St., where a complete sample display of jewelry boxes will be shown. **Henry Vidd**, Chicago representative, and **James Middlemas**, formerly on the Pacific Coast, will be located in the new office.

P. A. Steed, widely known in the packaging machinery industry, has resigned as vice president in charge of sales and advertising for the **J. L. Ferguson Co.**, Joliet, Ill. Mr. Steed has moved to California, where he is temporarily located at 432 New Hampshire St., Los Angeles. He will shortly announce future plans.

The new buildings erected by **Fibreboard Products, Inc.**, having been completed, the company has installed two giant rotary Michle presses—one at their Vernon (Los Angeles) plant and the other at



their Stockton plant. Designed especially for high-fidelity reproduction on carton board, these presses are said to be among the largest in the United States, built for simultaneous color printing of packages and cartons. The three-color press at Vernon and the four-color one at Stockton are capable of printing carton-board sheets as large as 52 by 76 in. Installation

of these presses has increased printing capacity approximately 20% in both plants.

The **Marathon Corp.**, Menasha, Wis., has announced that it will conduct the biggest trade-paper advertising campaign in its history in 1952. When a survey made by an independent organization confirmed the company's belief that the trade-paper field is a highly important one for a manufacturer of food packaging materials, Marathon scheduled 185 two-color advertisements in 26 publications in the food and packaging field for its current fiscal year, according to **Owen E. Lyons**, Marathon advertising manager. The survey revealed that trade-paper readership is most complete and most effective among the people who actually operate a business. Marathon feels, therefore, that through this campaign its story will reach people who are responsible for the day-to-day operation of the packaging section of the food industry.

Herbert D. Walton has been appointed to the post of sales manager of the **Empire Box Corp.**, Chicago.



Mr. Walton

Mr. Walton was formerly associated with the Container Corp. of America and the Pittsburgh Corning Corp. He has had extensive experience in creative packaging, design, merchandising and folding-carton sales.

Modern Containers, Inc., has announced the opening of a sales office in San Francisco, Calif., at 420 Market St. The new office is staffed by **J. W. Little, Jr.**, and **Al Morris**. Mr. Little was formerly sales manager for Decca Records Co. at Philadelphia; Mr. Morris was formerly with Milprint in the Bay Area. Both men are familiar with flexible packaging problems and will serve Northern California.

James A. Strong has been elected vice president and a director of **Allen Cartons, Inc.**, Dayton, Ohio. Mr. Strong, who was connected with the Specialty Paper Co. for over 30 years, resigned as chairman of the board of that company in February. He will supervise sales activities on some Allen Cartons accounts.

The **Rototype Corp.**, a new company at 36-41 36th St., Long Island City, N. Y., is offering a new service to package printers and converters in the cellophane, foil and allied paper industries. Rototype's new plant is planned to produce precision

*There's no
idea here for you!*



Patent Applied For

How to put vim and vigor into vitamin packaging



Glass bottles provide perfect protection for vitamins . . . and special H & D "Cell" Boxes provide perfect protection for glass bottles.

This economical shipping box was developed for U. S. Vitamin Corporation, New York, N. Y., by H & D to prevent bottle breakage and simplify packing operations . . . and it does just that! An ingenious arrangement of interlocking flaps

forms a one-piece box with individual cells for six bottles. Thus each bottle is protected on all sides and the unit is packed completely, ready for shipment, in a matter of seconds.

This idea, or an adaptation of it, may be the practical solution to your packaging problem. Contact H & D for the whole story. For a 14-volume "Little Packaging Library," write Hinde & Dauch, 5204 Decatur Street, Sandusky, Ohio.

H&D

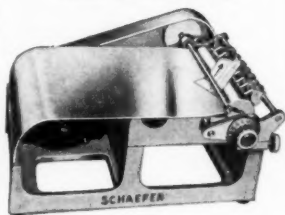
HINDE & DAUCH
Authority on Packaging



Branches: Baltimore, Md.; Boston, Mass.; Chicago, Ill.; Cincinnati, Ohio; Cleveland, Ohio; Dallas, Texas; Denver, Colo.; Detroit, Mich.; Evansville, Ind.; Hartford, Conn.; Houston, Tex.; Indianapolis, Ind.; Jacksonville, Fla.; Kansas City, Mo.; Louisville, Ky.; Miami, Fla.; Milwaukee, Wis.; Minneapolis, Minn.; New York, N.Y.; Philadelphia, Pa.; Pittsburgh, Pa.; Portland, Ore.; St. Louis, Mo.; St. Paul, Minn.; Seattle, Wash.; Springfield, Mass.; Toledo, Ohio; Washington, D.C.; Wichita, Kan.

Schaefer GLUERS and CEMENTERS

APPLY GLUE TO LABELS
FOR
BOXES-BOTTLES-CANS
PARCEL POST PACKAGES



SAVE 35% LABOR. Speedy machine-gluing instead of slow brush-dabbing. Round, square and die-cut labels glued. No adjustment except for glue coating. Ideal for short runs and production.

NEAT RESULTS. Printing stays clean. No glue ooze at edges of labels. No lumps, blisters or wrinkles. Easy to operate.



**FREE
TRIAL**

7" & 12"
WIDE

**EASY
TO
CLEAN**

PRACTICAL CONSTRUCTION. Bronze bearings. Calibrated dial glue control. Hand & motor driven. Use vegetable, resin glue latex and hot animal glue. 7", 12", 16", 22", 28", 34", 42", wide.



SCHAEFER GLUER-CEMENTER. Heavy-duty construction. Sizes 16" to 52" wide, for coating cardboard, leather, cork, masonite, foam rubber, fibre, leatherette, canvas & paper.

SCHAEFER MACHINE CO.

53 Carbon Street
Bridgeport, Conn.

PHONES: New York City—LE-2-2010
Bridgeport 68-2250
Boston—Arlington 5-8096

Agents in principal cities

Plants and people

molded, pre-made-ready rubber printing plates to the trade, and will make available a complete "art-to-plate" service. President of the new organization is Ed Larsen. Tom Barbera is secretary-treasurer and Thomas White is production supervisor.

Dr. Fred Olsen has been appointed vice president for Research & Development of Olin Industries, Inc., East Alton, Ill. Dr. Olsen, an authority in the chemicals and explosives industries, is also an Olin director and has been the director of research and development. He has been with Olin since 1929 and is known for his work in connection with cellulose and high explosives. Dr. Olsen was intimately associated with the company's entrance into the cellophane field.

Other key appointments in Olin's Re-



Dr. Olsen



Dr.
Hofrichter
(left)
and
Dr.
Mydans



Mr. Wommack, Jr., film development section chief; Edward Hartshorne, department manager; Michael Karelitz, chief, engineering section.

Dr. Louis C. Barail, who was chief biologist-bacteriologist of the U. S. Testing Co. for the past 11 years, has opened offices as a private consultant to industry in biochemistry and toxicology at 222 W. 83rd St., New York, and in Hackensack, N. J.

The International Paper Co., New York, has announced the election of Harvey P. Hood and John M. Kingsley to its board of directors to fill existing vacancies.

Avery Adhesive Label Corp., Montevia, Calif., manufacturers of pressure-sensitive

labels, have opened a new factory service office at 4378 Lindell Blvd., St. Louis, Mo. James W. Wilson, formerly with Avery's Chicago office, is manager at the new St. Louis office.

The Lynch Corp., Anderson, Ind., makers of packaging machinery, have announced the opening of an Eastern District Office at 207-211 E. 37th St., New York. New York warehouse facilities have been established for stocking emergency repair parts for Lynch packaging machines and for stocking a complete line of Lynch PAR air compressors. The new office is under the management of D. E. Stenson. He will be assisted by R. N. Craven.

The Howard Flint Ink Co. has announced completion of its new Denver factory, located at 8th and Canosa Sts. The new building has 23,000 sq. ft. of floor space and entirely modern new equipment is being installed which will triple the present capacity of the Flint factory.

Stanley D. Margerum has joined the R. M. Hollingshead Corp., Camden, N. J., as manager of special products for the Industrial-Aviation Division. In addition to his duties as packaging specialist for this division's products, Mr. Margerum will assist in the direction of sales on specification corrosion preventives, plastic coatings and industrial specialties.

C. R. Strehlau is now in charge of the Eastern office of the Triangle Package Machinery Co., Chicago. Mr. Strehlau, who was formerly with the Package Machinery Co., will cover sales and the scheduling of installation and service engineers. Walter P. Muskat, Eastern divisional manager, is being transferred to Chicago as director of sales, replacing Rex Stone.

The United Board & Carton Corp., Syracuse, N. Y., has completed the first phase of equipping its carton plants with air hammers for stripping. Three presses at the company's Victory Mills, N. Y., plant have been revised and the existing extension deliveries on these have been equipped with modern roll-off carriages and locking devices. Production at the plant has already increased 20% as a result of these improvements.

The Goodyear Tire & Rubber Co., Akron, Ohio, has announced that A. J. Gracia, who has been affiliated with the office of the vice president, has been named assistant manager of research and development activities. The post left vacant by Mr. Gracia's promotion has been filled by



Duraglas Shelfline bottles are available in 16 sizes: $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, 1, $1\frac{1}{2}$, 2, $2\frac{1}{2}$, 3, 4, 5, 6, 8, 10, 12, 16 and 32-ounce capacities.

Make your package **POP OUT**

MANY A MANUFACTURER wants package individuality—but cost factors make him turn to unadorned stock bottles instead.

However, stock bottles *can* be distinctive and still keep their

practical advantages of low cost, operating economy, strength and availability.

A different closure, a striking label design, an unusual use of color—presto!—a Duraglas stock-

mold bottle becomes an individual container worthy of *any* drug, chemical or toiletry.

Call the local Owens-Illinois office now, to discuss your specific needs.

Duraglas Bottles are Protectors of Quality

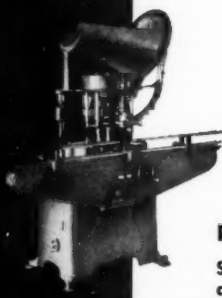
OWENS-ILLINOIS GLASS COMPANY • TOLEDO 1, OHIO • BRANCHES IN PRINCIPAL CITIES

RESINA CAPPERS

A MODEL FOR EVERY PURPOSE . . .

A SPEED FOR EVERY NEED!

Capacity up
to 60 per
minute.

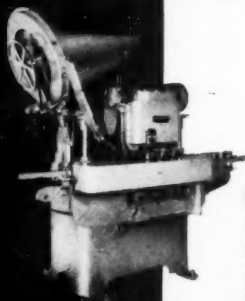


*Jobs
all
them
all*

RESINA

Standard, single head,
automatic screw capper.

Flexible
Fast
Fully
Automatic

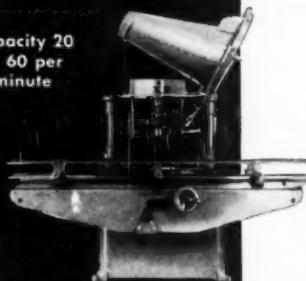


*Jobs
all
them
all*

RESINA

High speed, straight line
screw capper. Rated for
speeds up to 300 per
minute depending on
size of container.

Capacity 20
to 60 per
minute



*Jobs
all
them
all*

RESINA

Automatic innerseal ma-
chine for selecting and
applying standard inner-
seals to various types
and sizes of tin cans as
commonly used in the oil
industry.

Other models available.
Write for descriptive
literature.

Agents in principal cities through-
out the United States and Canada

RESINA AUTOMATIC MACHINERY CO., INC.

BROOKLYN 31, N. Y.

Plants and people

James D. D'Tanni, previously in charge of research studies on synthetic rubbers and vinyl plastics materials. Other new assignments are those of H. J. Osterhof, director of research, and W. W. Vogt, development manager of the Tire & Compounding Division. Working under Dr. Osterhof at the company's research laboratory are A. M. Clifford, manager of organic research; J. A. Merrill, manager of engineering research; H. A. Endres, manager of rubber and plastics research.

Expansion of the Pliofilm sales force by the Films & Flooring Division has been effected through the appointment of field representatives at Chicago, Atlanta and Charlotte. N. C. Daniel J. Jette has been assigned to the Chicago office; Thomas D. Hailey, Jr., to Atlanta, and Frank A. Owens to Charlotte. The establishment of two new district managerships for the Films & Flooring Division have also been announced. L. C. Parker, Charlotte field representative, has been shifted to Atlanta to head sales of Pliofilm, Vinylfilm, rubber and vinyl flooring in the Southeastern area. Kenneth J. Whisler, who has been stationed in Dallas as a field representative, has been promoted to manager in the south-central area.

The board of directors of Westfield River Paper Co., Inc., Russell, Mass. and its subsidiary, Glassine Paper Co. of West

Mr.
Cain
(left)
and
Mr.
Summerlin



Conshohocken, Pa., have announced the election of R. L. Cain as vice president in charge of sales. Mr. Cain, who has been sales manager of the companies since 1948, has named J. A. Summerlin as assistant sales manager. The companies manufacture glassine and greaseproof papers for protective packaging.

E. I. du Pont de Nemours & Co., Inc., have announced plans for construction of a new \$2,000,000 Haskell Laboratory of Industrial Toxicology near Newark, Del. This will provide enlarged facilities for the company's industrial toxicology laboratory which has been located at the DuPont Experimental Station in Wilmington since 1935. The Haskell Laboratory tests DuPont products and manufacturing processes to eliminate potential hazards to

employees and customers. The new building is expected to be completed in about a year.



The Forbes Lithograph Mfg. Co., Boston, Mass., have announced the appointment of **Bruno Gonella** to represent them in New Jersey and Pennsylvania. Mr. Gonella brings to Forbes a broad background as creator and designer, having been associated with the creative graphic arts field for over 30 years.

The board of directors of **Stein, Hall & Co., Inc., New York,** adhesive manufacturers, elected **Robert Strasser** as executive vice president and **Joseph C. Blauvelt, Sadie Feldman** and **Daniel H. Lipman** were elected vice presidents. **Ernest Rusch** was named assistant vice president. **Lawrence Gussman**, vice president in charge of manufacturing and technical research, was elected president of **The Stein-Davies Co.,** a manufacturing subsidiary of Stein, Hall located in Long Island City, N.Y. **S. Crawford Bonow** was elected assistant vice president and **Frank G. Fackler** was named plant superintendent of Stein-Davies.

Continental Can Co., Inc., New York, has announced the appointment of **Edward E. Jones** as assistant to the general manager of its **Crown & Cork Division.** Mr. Jones, formerly with the Ditto Corp., will make his headquarters at the main office of Continental's Crown & Cork Division, Wilmington, Del.

National Container Corp., New York, has announced the appointment of **Edward R. Smith** as sales manager of its Milwaukee, Wis., division. Mr. Smith, who joined National Container in 1948, has been sales-service manager of the company's Chicago Division. Also announced is the appointment of **George A. Farrah** as general manager of the Tomahawk, Wis., box plant. Mr. Farrah will also supervise the Milwaukee and Twin City sales area as part of his new assignment.

The opening of a new Boston branch sales office and warehouse has been announced by **Minnesota Mining & Mfg. Co., St. Paul, Minn.** The new one-story building is located at 1330 Centre St., Newton Center. **W. M. Hobelsberger**, Boston office manager, said the new unit is another link in 3M's nationwide expansion program. Other branch officials who will headquarter in the new office are **J. H. Hargreaves**, abrasives sales manager for industrial and refinish trades; **A. S. Drew**, sales manager for general-line tapes; **H. B. Kosanke**, sales manager for retail cellophane tape; **J. E. Warner**, sales supervisor for "Scotchlite" brand re-

flective sheeting. Electrical tape sales will continue under the direction of **E. F. Gregg**, with headquarters in New York. **Howard Norman**, also of New York, is sales manager for adhesives. Hardware maintenance sales of the Boston branch are under the direction of **H. G. Kelly** of New York.

The Dow Chemical Co., Midland, Mich., has announced the transfer of **John C. Chamberlin**, formerly of the St. Louis office, to the molding powders section of the plastics sales department in Midland. Succeeding Mr. Chamberlain in St. Louis is **Frank C. Kenyon, Jr.**, of the Boston office. Moving to Boston is **William J. Monahan**, who recently completed the company's sales training program. **Robert J. Adam** has joined the Detroit office of Dow, where he will handle the sale of Styrofoam.



Mr. Field

The Keller-Dorian Corp., makers of stainless metal foils, New York, have announced the opening of a Chicago sales office at 608 S. Dearborn St. District manager is **Robert G. Field**, who has been in the foil business for the past 14 years and is widely known in the Illinois area.

Union Bag & Paper Corp., New York, has announced the appointment of **Harry Recher** as assistant to **L. J. Doyle**, vice president in charge of bag and paper sales.

The following personnel changes in Union's Corrugated Container Division have been announced: **A. G. Naudain**, assistant to the director of corrugated container sales, with headquarters in New York; **C. A. Agar, Jr.**, Eastern Division sales manager; **J. F. Gross**, assistant to the Eastern Division sales manager; **J. A. Biggins**, Western Division sales manager; **L. A. Wulff**, assistant to the Western Division sales manager; **W. S. Hampton**, Western sales service manager. Eastern Division personnel will be located in Trenton, N. J.; Western personnel, in Chicago.

Barnard K. Sichel has been elected vice president in charge of engineering and production for **Lerner Plastics, Inc., Garwood, N. J.,** makers of plastic containers, capsule vials, applicators, medical devices and specialties, as well as custom injection molding.

W. J. Fitzpatrick, well known to the pharmaceutical manufacturing industry as the originator of the "Fitzmill," has organized a new sales and engineering company known as the **Fitzpatrick Engineering Co., Inc.** The new firm will supply Arthur Colton Co.'s filling, clos-

(This article continued on page 156)

THIS IS THE ANSWER!...
First Quality Pliofilm Bags in a Consistently
Efficient High Speed Operation!



130 East 13th Street, New York, N. Y.

MACHINE CORP.

MODEL PO-2

HUMUS • PEAT MOSS BAGS



TOY BAGS



CARROT BAGS



MEHL

VEGETABLE BAGS



CANDY, BAKERY GOODS
DOG FOOD



A Few of the Sydney-Thomas Products

Nationally Advertised

under the SEE-SAFE trademark



SEE-SAFE TRANSPARENT
PLASTIC BAGS FOR
CLOTHING

SEE-SAFE Plastic Storage and Travel Bags have patented air tight closure devices, protect against moths, dust and dirt.



SEE-SAFE MULTI-USE PLASTIC
DROP CLOTHS

A thousand uses in every household. Heavy, transparent plastic . . . 9 by 12 feet . . . wipes clean . . . completely non-sticking. Sold through hardware, variety and department stores.



SEE-SAFE FROZEN FOOD PACK-
AGING FOR HOME FREEZERS

SEE-SAFE Plastic freezer bags and boxes for vegetables, fruits and poultry and roll wrappings of polyethylene, foil and cellophane.



MEHL PACKAGING SATISFYING NEW CONSUMER DEMANDS

Illustrated are a few of the many products packed in MEHL bags. Plastic packaging is adding new buying appeal and protection to products of every type. You'll get greatly increased sales results if you use MEHL plastic bags designed to meet your packaging requirements. Also, cellophane and foil bags and wrappings. For expert advice . . . prompt delivery . . . reasonable prices . . . write, wire or phone.

Listed below are a few of the typical civilian and military products for which MEHL provides packaging:

- Airplane engines and parts
- Electronic Tubes
- Machine tools
- Clothing and parachutes
- Radio parts
- Large and small arms
- Food Products
- Medical Supplies

These and many other SEE-SAFE PRODUCTS ARE SOLD THROUGH department stores, dry cleaners, locker plants, hardware, variety and grocery stores.

for packaging

MEHL BAGS . . . the choice of Fashion Frocks for parachute packaging!

HERE IS WHAT MR. MEYERS SAYS:

"With the advent of the defense program, Fashion Frocks began producing parachutes. We needed packaging help and got it . . . we found your organization "top-drawer" . . . in the quality of your packaging materials, in helping us figure out government "specs" and in the prompt delivery we needed."

Meet the complex problems of military packaging with MEHL products. Carefully made from polyethylene plastic . . . aluminum foil . . . and combinations of paper and cloth back material. MEHL products meet required specifications covering packaging for domestic and export military shipments against water, moisture and corrosion.

For packaging . . . of military or civilian items . . . call on MEHL for service, delivery and reasonable prices.

MEHL MILITARY PACKAGING GUIDE

. . . a new, comprehensive and condensed outline on "protective barrier" packaging conforming to military specifications. Yours for the asking.



Converters of Plastics, Cellophane, Foil and other Flexible Materials

MEHL MANUFACTURING COMPANY

DIVISION of SYDNEY-THOMAS CORP.

2057 Reading Road,

Cincinnati, Ohio



Finished products in MEHL heat-sealed bags are proudly examined by Mr. Sidney Meyers, Vice President and General Manager of Fashion Frocks, Inc., famous dress manufacturer now producing parachutes for defense.

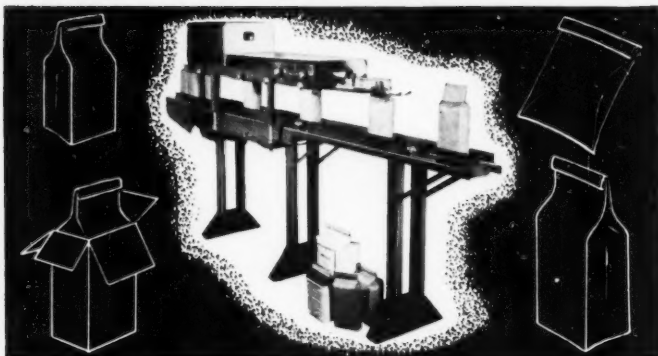


Parachute straps are quickly slipped into MEHL Bags conforming to military specifications.



These bags are heat-sealed after packing;

FRY BAG SEALER



Makes Sift-Proof Seals in Heavy Weight Paper Bags

Fry Model CSG automatically makes a double folded sift-proof heat seal in the top of any heavy weight paper bag. The first fold is securely heat sealed; the second is glued for extra safety.

Bags handled include polyethylene and polyfilm lined, polyethylene coated and those Other models available . . . when writing, please submit a sample of your bag and your product.

with thermoplastic top sealing bonds. Simple adjustments for bags of various heights. This model also handles bags which are not heat-sealable by gluing the folds.

Machine above is perfect for granular or fine products such as insecticides, chemicals, powdered paints, fertilizers, dog foods, etc.

GEORGE H. FRY COMPANY

167 Front Street
N. Y. 38, N. Y.

For the aniline printer with a quality standard...

1 responsible source
for all **3** services



ENGINEERED ARTWORK



EXTRA-DEPTH ENGRAVINGS



PRE-MADEREADY RUBBER PLATES

For all 3 services or any one... use MOSSTYPE with confidence... for MOSSTYPE is the only fully integrated company in the country devoted exclusively to rubber plate production.

WORLD'S BEST SOURCE, Inc.
RUBBER PLATES
and DESIGN ROLLERS

MOSSTYPE
CORPORATION

FROM ART TO PLATES

33 FLATBUSH AVE., Brooklyn 17, N. Y.

...a complete production service for aniline printers everywhere

Plants and people

(This article continued from page 153) ing, packaging, tableting machines and heavy-duty presses to the pharmaceutical, plastic, metal powder and other industries in seven Midwestern states. Mr. Fitzpatrick will direct sales and service of the equipment from his Chicago office. Associated with Mr. Fitzpatrick is **Gordon W. Covey**, who has been district manager and sales engineer at the Arthur Colton Co.'s New York and Chicago branch.

The new Eastern plant of **Chippewa Paper Products Co., Inc.**, Chicago, will soon be in full operation. This plant, located in South Hackensack, N. J., features all new equipment and will facilitate service to Baltimore, Washington, Virginia and the Carolinas.

The **Bagley & Sewall Co.**, announces the resignation of **T. Carter** and **E. Peterson** of the Watertown, N. Y., office. **J. Scheuermann** of the New York City office has resigned effective April 15. Bagley & Sewall's New York office has been discontinued and all business pertaining to winders, paper machines and other equipment manufactured by the company will be handled directly from the home office, 101 Pearl St., Watertown, N. Y.

Richard Schmidt has been elected to the newly created position of chairman of the board of the **Schmidt Lithograph Co.**, San Francisco. Succeeding him as president is **Carl R. Schmidt**, formerly vice president and general manager. The new president will continue to be general manager. Vice presidents now are **Otto A. Schoning**, who was re-elected, and **George D. Taylor**, who is also company treasurer. Continuing as secretary is **Morton Schmidt**, while **Lorenz Schmidt** has been elected assistant secretary.

Bemis Bro. Bag Co. has announced the election of **C. W. Loomis**, vice president and director of personnel, as a member of the board of directors. **F. V. Deaderick**, Eastern director of sales, has been named a vice president.

The board of directors of the **Muirson Label Co., Inc.**, San Jose, Calif., has elected **Robert I. Bentley, Jr.**, to the newly created office of board chairman. Succeeding him as president is **George R. Langlois**. The following vice presidents were elected: **Whitney J. Wright, J. H. Eilers, Jr.**, **George E. Fichtner**, **Sheldon E. Riveroll** and **Walter E. Riffe**. The (This article continued on page 195)

MODERN PACKAGING

everything

from

soap

to

nuts

looks

better . . .

sells

faster . . .

in

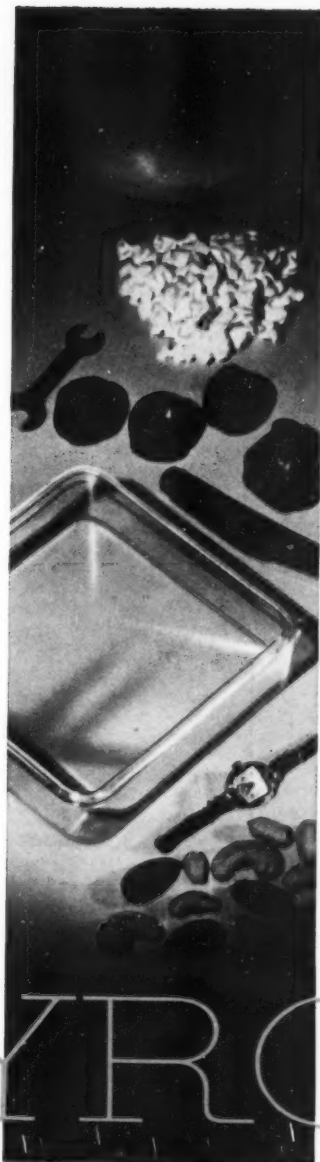
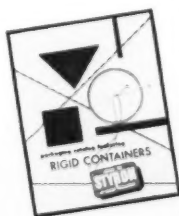
glistening

rigid
containers

made of

STYRON

Many sizes and shapes are now available to meet your packaging needs in Dow's latest packaging catalog featuring rigid containers made of Styron. Send for it today.



Whatever your product, you'll find it takes on new importance at the point of sale when it's attractively packaged. And when you send your product to market in glistening rigid containers made of Styron (Dow polystyrene), you add not only eye-appeal but thorough protection that keeps quality intact. That means sales . . . and repeat sales!

There is no limit to the design possibilities in rigid containers made of Styron. Crystal clear or in rich color . . . or in smart color combinations . . . rigid containers made of Styron will make your product truly distinctive. Qualified molders will meet your specific packaging requirements.

Give your product every packaging advantage . . . sparkling eye-appeal . . . low-cost protection against costly damage from deterioration, handling, breakage . . . light weight to reduce shipping costs. Give your product its own rigid container made of Styron!

Write Dow today for detailed information.

THE DOW CHEMICAL COMPANY

Plastics Department • Packaging Section PL-154

MIDLAND, MICHIGAN

New York • Boston • Philadelphia • Atlanta
Cleveland • Detroit • Chicago • St. Louis • Houston
Los Angeles • San Francisco • Seattle
Dow Chemical of Canada, Limited, Toronto, Canada

The Dow Chemical Company
Plastics Dept., Packaging Section PL-154
Midland, Michigan

Please send me your latest packaging catalog
featuring RIGID CONTAINERS MADE OF STYRON.

Name

Company

Street

City State

Product to be packaged



For your information

Dr. Berton S. Clark, scientific director of American Can Co.'s Research and Technical Department, has been appointed chairman of the **Can Mfrs. Institute Research Committee** for 1952. Most important current project of the committee is the development of constructive methods of tin conservation for national defense.

The 15th Annual Convention of the **Super Market Institute** will be held in the Cleveland Public Auditorium, May 11-15. After almost a decade in Chicago, the convention will move to Cleveland in an effort to provide controlled traffic of the increasing crowds the event draws year after year. Theme of the convention will be the "The Key to Profitable Super Market Operation" and will cover the broad subjects of how to increase volume, cut costs and develop people. Exhibits will reach almost 400 in number this year.

A. C. McGeath of the American Box Board Co. has been named a vice president of the **Society of Industrial Packaging and Materials Handling Engineers**. Mr. McGeath fills the vacancy caused by the resignation of **H. E. Brill**.

All users of induction and dielectric heating equipment, particularly those whose equipment was manufactured prior to June 15, 1947, are reminded by the **National Electrical Mfrs. Assn.** that FCC Rules and Regulations, Part 18, require certification on or before June 30, 1952, of compliance with certain minimum radiation requirements. It is suggested that packagers using high-frequency electronic heating equipment more than five years old contact the manufacturer of the equipment or a consulting engineer for guidance in complying with the rules.

Recent developments in the handling and merchandising of pre-packaged fresh fruits and vegetables will highlight the Second Annual Conference and Exposition of the **Produce Prepackaging Assn.**, to be held at The Neil House, Columbus, Ohio, June 10-12. The Conference will include open forum and symposium sessions designed to discover how pre-packaging can be made to serve consumers better. Methods of reducing costs and making operations more efficient will be discussed and a survey will be made to show the over-all development of the industry and its relation to the total production of fresh foods. In conjunction with the Conference, an Exposition of materials, supplies and services will be held. Details on the Conference and Exposition

may be had from the association's headquarters, 420 Lexington Ave., New York.

To cooperate with the Government in flexible barrier specifications, The **National Flexible Packaging Assn.**, Cleveland, Ohio, has appointed a Technical Committee on Specification Packaging. Ex-officio members are **Carl Hurlage** of the Midwest Foil Co. and **Clinton K. Royce** of Vanant Products, both of whom were recently elected directors of the association. Other committee members include **Marvin F. Atlas** of Atlas Package & Container Corp., **Corder T. Brown** of Rap-In-Wax Paper Co., **Oscar W. Fisher** of Kennedy Car Liner & Bag Co., Inc., **John M. Fultz** of Reynolds Metals Co., **T. A. Lancaster** of Plastic Film Corp., **K. E. Prindle** of The Dobeckmum Co., **Nat Scher** of Melrose Packaging, **R. K. Stone** of Kellogg Container Div., **U. S. Envelope Co.**, and **Philip C. Whiting, Jr.**, of Marvellum Corp. The association held a specification packaging meeting in Atlantic City on March 31st.

Illustrations and descriptions of the line of filling, packing and weighing machines built by **Areco Aktiebolag**, Stockholm, Sweden, for the **Areco Machine Co., Inc.**, are available in a newly issued brochure. Copies may be obtained on request to the Areco Machine Co., Inc., 25 W. 43rd St., New York 18, N. Y.

The **Research and Development Associates, Food and Container Institute**, will hold its Fifth Annual Meeting on April 15-17, at the Palmer House, Chicago. Over 300 leaders of science, industry and the Armed Forces will meet to survey the year's progress and future objectives in their effort to improve qualities and types of food and containers for the Armed Forces. Specific feeding problems inherent in the Korean conflict will be discussed. Speakers will include **Dr. Floyd L. Miller**, vice chairman of the Research and Development Board, Department of Defense, as well as representatives of the Army, Navy and Air Force. Those in attendance will tour three Government installations: the QM Subsistence School, the Army Medical Service Meat and Dairy Hygiene School, and the QM Food and Container Institute of the Armed Forces.

The **Sorg Paper Co.**, manufacturer of Fourdrinier and cylinder specialty papers, Middletown, Ohio, is celebrating its 100th year of business. The company's centennial publication reviews the history of the company, which was organized in 1852, along with American progress in other fields. The first name identified with

the various mills now operating under the Sorg name was **John W. Erwin**, who opened the original mill in 1852. The modern-day history of Sorg began in 1899, when **Paul J. Sorg** purchased what had originally been the Hill & Peck mill and established The Paul A. Sorg Paper Co. **Paul A. Sorg** served as president until his death in 1913, when **John A. Aull, Sr.**, was elected to succeed him. **Donald G. Driscoll** is the current president.

"Communication of Technical Information" by **Robert M. Dederich** (Chemometrics, Inc., New York; \$5) is a new lithoprint 116-page book designed to aid executives who are handicapped by technical personnel who do not understand logically when and where information is needed, and also to aid professional people to write or orally present their ideas intelligently to management. The book concerns itself with the fundamental principle of bridging the gap between the

What's Doing

April 15-17—The Research and Development Associates, Food and Container Institute, fifth annual meeting, Palmer House, Chicago.

April 16-18—National Petroleum Refiners Assn., Plaza Hotel, San Antonio, Tex.

April 21-24—National Fisheries Institute, Biltmore Hotel, Los Angeles.

April 27-May 1—American Drug Mfrs. Assn., Homestead Hotel, Hot Springs, Va.

April 28-30—National Independent Meat Packers Assn., Hotel Sherman, Chicago.

May 11-14—National Paper Box Mfrs. Assn., second annual set-up paper box competition and 34th annual convention, Drake Hotel, Chicago.

May 11-15—Super Market Institute, 15th annual convention, Cleveland Public Auditorium, Cleveland, Ohio.

May 12-14—Toilet Goods Assn., annual convention, Waldorf Astoria, New York.

May 15-20—National Candy Wholesalers Assn., Palmer House, Chicago.

May 19-21—Glass Containers Mfrs. Institute, Greenbrier, White Sulphur Springs, W. Va.



DISTINCTIVE DESIGN

plus • strength
• economy

Your package will have a quality appeal if it's sealed with an Artmold "R" design cap. These handsome closures have all the sales-winning appearance of private designs yet cost no more than standard molds.

• Armstrong's Artmold® plastic caps are carefully molded for maximum strength. They feed easily into capping machines, stand up under the pressures of high-speed equipment. Because they resist chipping and cracking, costly production downtime and rejects are reduced to a minimum.

Versatile "R" design caps are ideal for a variety of applications. Some have plain tops, others have open tops for use with droppers. Still others have a well in the cap for holding a nail-polish quill brush or a glass rod.

"R" design caps are now available in all popular sizes. Finished with a durable luster, they can be made in a wide choice of non-fading colors.

For further information, just contact your Armstrong representative or write direct to Armstrong Cork Co., Glass and Closure Division, 5904 Prince St., Lancaster, Pa.

Western Representative: I. F. Schnier Co., Inc.
San Francisco 7 and Los Angeles 12

ARMSTRONG'S *Artmold* PLASTIC CAPS

Packaging Headquarters for Armstrong's Glass Containers, Embossed-Top Corks, Metal Caps, Crowns, and Du Pont "Cel-O-Seal" Bands

Presenting **Thilco** **POLY-KRAFT**

POLYETHYLENE COATED OR LAMINATED KRAFT PAPERS UP TO 10 FT. WIDTHS FOR PACKAGING SO MANY PRODUCTS... *So Much Better!*

Standard Grades for Defense Packaging

Thilco POLY-KRAFT Type I, Flat

Meets JAN-B-121 Type I, Grade A, Class I for wrapping and JAN-P-117 Type I, Grade A, Class A B & C for bag conversion.

Thilco POLY-KRAFT Type I, Machine Creped

Meets JAN-B-121 Type I, Grade A, Class I for wrapping.

Thilco POLY-KRAFT Type II, Flat

Meets JAN-E-121 Type II, Grade A, Class I for wrapping and JAN-P-117 Type II, Grade A, Class A B & C for bag conversion.

Thilco POLY-KRAFT Type II, Machine Creped

Meets JAN-B-121 Type II, Grade A, Class I for wrapping.

Custom Made for Industrial Packaging

The water, water-vapor, grease, alkali, acid, alcohol resistant properties of polyethylene combined with its non-toxic, odorless, tasteless, stable, flexible, and heat sealable characteristics provide Protection Plus when combined with Thilco:

M.F. or M.G. Kraft — 25 # to 150 # Basic Weight
Natural — Bleached White or Special Colors
Wet Strength Treated
Mold Resistant Treated
Machine Creped
Decorated with Aniline or Rotogravure Printing

POLY-KRAFT is ideal for hard to preserve and protect products such as foodstuffs, confections, agricultural and nursery products, chemicals and hygroscopic powders, textiles and cordage, machinery and machinery parts — and perfect as liners for bags, fibre cans and drums.

Let our Thilco field representative consult with you on your problem.

Thilco

NEW YORK

DETROIT

Functional Papers FOR PROTECTION THAT COUNTS!

CHICAGO

THILMANY PAPER CO. • KAUKAUNA • WISCONSIN

MINNEAPOLIS

*For your
information*

interests, knowledge and language of technicians and industry executives.

The preparation, properties and uses of the new formulations of Vinylite dispersion resins known as plastigels are described and illustrated in a new booklet published by Bakelite Co., a Division of Union Carbide & Carbon Corp. Technical data on these substances are included in the 16-page booklet titled "Vinylite Dispersion Resins—Plastigels." Advantages from the standpoint of costs and production benefits are explained and a bibliography lists some of the articles which have been published on the subject. Copies of the booklet may be had by writing to Bakelite Co., 300 Madison Ave., New York 17, N. Y.

A comprehensive catalog completely describing each of the products in the broad range of Celanese organic chemicals has just been released. Copies of the booklet may be obtained by writing on your company letterhead to **Celanese Corp. of America**, Chemical Division, Dept. 500A, 180 Madison Ave., New York 16, N. Y.

Also available from Celanese Corp. is its new 1952 catalog. This 40-page book includes information on all products in the Chemical Division, including aldehydes, ketones, solvents, acids and glycols, and lists the physical and chemical properties of many of the chemicals.

A packaging forum and an exhibit of packaged fish will feature the 7th annual **National Fisheries Institute** convention to be held April 21-24 at the Hotel Biltmore, Los Angeles. The packaging session will have as moderator **Arthur Freeman** of Freeman Certi-Fresh Foods. Panel members will be **W. S. Jackson** of Marathon Corp.; **Bruce Wallace** of the Fred Todt Co. and **Walter Skow** of Ralphs Grocery Co. Judging and scoring of packaged fillets and shrimp will feature one of the convention sessions.

Discussions with Department of Defense officers and representatives from operator-contractor-managed Ordnance plants regarding procurement and production of nailed wooden boxes and the election of association officers highlighted the **National Wooden Box Assn.'s** 53rd annual meeting held recently in New Orleans. The year's requirements, beginning July 1, for ammunition boxes were estimated at 500 million board feet exclusive of small-arms boxes. This will require nearly 18% of the nation's entire lumber output based on a 35-billion-foot total. **H. H. Pein** of the Pein Box Co., Oregon, Ltd.,

did YOU see...

our new development for sheeting and slitting at the Atlantic City Packaging Show? If so, you saw the new differential...the feeding unit and the knife for the new 62" Automatic Roll Sheet Cutter...the Photoelectric Cutoff Register Control...and the Beck Razor Blade Slitter and Rewinder.

Whether you did or did not see these money-savers you owe it to yourself to write now for facts on how they can solve your cutting problems.



CHARLES BECK MACHINE CORPORATION
406 N. 13th Street Philadelphia 8, Pa.

BECK

P.S.



another
Profit Story
by BRAUN

... A story in glass designed for you... designed to make your sales surge! The OBLONG FOOTED—new—now available in a complete size range because of the repeal of M51. Here is dramatic beauty—combining simplicity with stability. Dominate it with your label created by Glass Crafters in striking ceramic design. Adopt it and make yours—A Profit Story!

In 1, 2, 4 and 8 oz. sizes
Ask About It!

CONTAINERS AND CLOSURES

W. BRAUN CO.

DEPENDABILITY
SINCE 1909

Quicker, Easier

FILLING BOTTLES, JARS, TUBES, CANS



The Anderson Hand Filler is fast, easy to operate and strictly sanitary. It handles liquids, semi-liquids, creams, pastes and greases. Hopper capacity, 5 gallons, quantities up to 16 ounces dispensed per stroke. Entire machine, except base plate, is stainless steel or nickel silver. Easy to clean. Rubber feet under base to prevent slippage. Filler (Model C-2-3) can also be supplied with foot treadle.

Send for Bulletin No 4-29



ANDERSON BROS. MFG. CO., ROCKFORD, ILL.

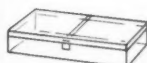
Anderson Fillers



Thousands of
products are
packaged in our

Transparent Plastic Boxes!

"Sit on top of the world" as you improve your packaging with boxes from the WORLD'S LARGEST SOURCE



#300
7 1/4" x 3 3/4"
x 1 1/4"
Hinged

for TRANSPARENT PLASTICS BOXES.

1001 different rigid Polystyrene boxes from 50 molders... in stock, no mold costs, all sizes, shapes, styles... or we will design one to meet your need.

Write for illustrated catalog TODAY!

BRADLEY INDUSTRIES

1652 N. Damen Ave., Chicago 47, Tel: ARmitage 6-8198



#50
1" x 1" x 3/4"
Hinged



#512
10 1/4" x 6 1/2" x 2"
12 compartments



#36
2 1/4" x 1 1/8" x 1 1/4"

For your information

presided over the sessions until the election of his successor, **D. A. McNeill, Jr.**, of McNeill, Lauff & McNeill, new association president. Other officers elected were: **R. F. Miles** of Rathborne, Hair & Ridgeway Box Co., first vice president; **Morris Milbank** of Rogue River Box Co., second vice president; **Leslie J. Chaffee** of Chaffee Bros. Co., third vice president. Re-elected were executive vice president **C. D. Hudson** and treasurer **P. John Galbraith**. Members during the business session approved a continuing and vigorous trade promotion program.

The Third International Paper and Allied Trades Exhibition will be held from Oct. 23 to 31 in Paris, Parc des Expositions, Porte de Versailles. The exhibition will bring together makers of machinery, equipment and supplies for the manufacturer, converter and printer of paper and paperboard. Information on attendance may be obtained by writing to the Commissariat General du Salon des Techniques Papeteries et Graphiques, 40, rue du Colisee, Paris 8, France.

The plastics department of **The Dow Chemical Co.**, Midland, Mich., announces the availability of a technical data bulletin on the use of Dow Latex 512-K paper-coating formulations on size press equipment. The bulletin contains complete information on the properties of the latex and data on how these size press formulations allow the production of a new line of coated papers without the addition of special equipment. Copies of the bulletin may be had from the Dow company.

The 1952 "Market Guide for Latin America" (31st revised edition) has just been issued by its publisher, the **American Foreign Credit Underwriters Corp.**, 170 Broadway, New York. This new edition lists and gives credit and capital ratings for more than 100,000 individual buyers and sales representatives in all countries of Central and South America, Mexico, Cuba, Puerto Rico and the West Indies. A trade Classifier facilitates the selection of firms in any given line of business. A free descriptive folder outlining auxiliary services and subscription terms is available from the publisher.

The first in a series of unique user-manufacturer conferences sponsored by **The Material Handling Institute's Industry Service Committee** held recently inaugurated a program of service to industry designed to crystalize up-to-date thought and development in the realm of better industrial efficiency through improved materials-handling methods. The conference, held in Pittsburgh, brought together 16

delegates, one from each of eight equipment manufacturers and one each from the ceramic, chemical, coal-mining, grain, metal-producing, mineral-mining, quarrying and process industries. Each user representative posed a problem characteristic of his industry. Working informally under chairman **L. West Shea**, president of The Material Handling Institute, Inc., and co-chairman **H. H. Hall**, vice president of **The American Material Handling Society, Inc.**, the engineering representative of each manufacturer was called on to offer suggestions and solutions. A detailed summary of the conference proceedings was prepared by technical press representatives in attendance and is available from MHI headquarters. The next in the series of conferences has been scheduled for the latter part of May, either in Detroit or in Chicago, on "Better Methods of Handling Scrap."

A compact, pocket-sized manual of practical ideas and suggestions for the sales engineer who wants to analyze and improve his methods of finding, contacting, selling and servicing industrial customers is titled "Selling to Industry," by **Bernard Lester** (The Industrial Press, New York; \$3.50). In this book, Mr. Lester has set forth in a brief, realistic way those key points which have from experience been found to be most effective. The book is suggested for use by industrial concerns as a training manual for their sales engineers.

One of the most elaborate brochures to be put out by a packaging-machinery manufacturer is the latest one published by the **F. B. Redington Co.** illustrating and describing the company's line of automatic machines for cartoning, wrapping and special packaging. Various kinds of products that are packaged by Redington machines are also illustrated. Copies of the booklet, which has a three-color printed, acetate-laminated cover, may be obtained by writing the Redington Co., 112 S. Sangamon St., Chicago 7, Ill.

The Crown Cork & Seal Co., Baltimore, Md., has just issued a book aimed toward simplifying the selection and purchase of metal closures for glass-packed products. Extensively illustrated in color, it covers the types of Crown closures and liners in general use for food, drug, chemical, cosmetic and other products packed in glass. Descriptions of Crown's quality control, design service for closure decorating, laboratory service and nationwide warehouse service are included. Copies of the booklet may be obtained on request to the Crown Cork & Seal Co.

LABELS TAGS SEALS WRAPS

complete service

From initial design—to completed labels and tags. We make our own dies and engravings—do our own embossing, stamping, printing and finishing. For distinctive packaging call Cameo today!

Labels and Seals

- MULTI-COLOR
- PAPER OR FOIL
- EMBOSSED & PRINTED
- HEAT SEAL
- PRESSURE SENSITIVE
- SPECIALTY SEALS
- STOCK LABELS
- DIE CUT

Tags — Wraps Displays

for ADVERTISING
PROMOTION
MARKING
PRODUCTION



CAMEO
DIE AND LABEL COMPANY
Vendors of Fine Labels, Tags and Packages
154 WEST 14th STREET, NEW YORK 11, N. Y.
Chicago 5-0229

Canada: Cameo Crafts, Inc.
187 St. Paul St., W., Montreal 1

Washington review

The outlook for practically every type of packaging material is improved for the second quarter. Many users of steel and aluminum received additional allocations in the first quarter and the predictions of drastic shortages in this quarter have given way to strong optimism as the result of stretched-out defense requirements, increasing production and softened civilian demand.

All curbs on once-scarce lead have been removed. Restrictions on rubber have been lifted. Supplies of cellophane are fairly close to a balance with demand. Polyethylene capacity is growing and, as previously reported, may permit removal of controls in the third quarter. Paper and paperboard consumption, often called a barometer of business, moves farther away from a seller's market, though some industry and Government spokesmen predict the danger of paper shortages is by no means ended.

The outcome of current and impending labor negotiations will have an important influence on the supply-demand balance. Barring prolonged work stoppages or increased war threats, the removal of certain controls is almost sure to highlight the supply picture in the months ahead.

Lead

Removal of all restrictions on the use of lead (Amended Order M-38) is another bright spot in the metals outlook. The improved supply stems largely from increased imports.

Supplies of lead this year, it is estimated, may be 1,300,000 tons, an increase of 150,000 tons over 1951.

Only a few months ago lead was scarce and users found restrictions difficult to live with. The amended order permits consumers to build stocks up to a 60-day inventory.

Aluminum foil

Converters of aluminum foil and NPA officials have been studying means to improve industry operations under the aluminum foil order, M-67.

Proposed amendments would:

1. Provide a system to give preferential treatment in the filling of orders for most essential uses.
2. Combine two product classifications in Schedule I, which gives the percentage of base-period consumption of aluminum foil which may be used in various products.
3. Make foil intended only for locker-plant use subject to provisions of the order.
4. Permit a shifting of aluminum foil

from one product classification to another to meet the industry's seasonal fluctuations.

Inclusion of foil exclusively used in locker plants would enable the plants to purchase this foil as a Class B product. Currently the foil cannot be purchased without a CMP ticket.

The aluminum industry's advisory committee recommends more recognition of the industry's essentiality and seeks an increase in aluminum allotments to permit the industry to operate at the levels of use specified in Schedule I of M-67.

Tinplate

Prompt elimination by NPA of quota restrictions on the manufacturing of items specified in Can Order M-25 has been urged by the industry's advisory committee. This is believed necessary to let can manufacturers absorb greater quantities of tin-mill products than is possible under the existing order.

Meanwhile, NPA has amended Tinplate Order M-24 to ease its restrictions slightly. Certain off-grade materials now can be used for products not formerly permitted to be made under M-24. The products are "unmended menders," "unassorted temper tinplate" and other coated secondaries.

Steel strapping

Whether or not NPA will seriously consider revocation of the steel-strapping order, M-59, depends on uninterrupted production in the steel industry, it is said. If provisions of the order are revoked, NPA states that the 45-day inventory limitation in Regulation I will be retained.

Approximately 110,000 tons of carbon steel a quarter have been allocated to the steel strapping industry. The necessity of providing carbon steel at this level is recognized and allocation will continue at this level if M-59 is not revoked, NPA believes.

Industry representatives for the most part report 30-day supply inventories and no backlog of orders.

Scrap recovery

The need for scrap metals has not diminished because of the improved outlook for metals and continued effort in the scrap-recovery drive is urged by NPA. Inventories of scrap in the hands of both consumers and dealers is said to be dangerously low.

Scrap recovery is vital to the defense effort and to civilian production now and

will be for many months to come. In steel, scrap makes up one-third of the metal produced. The same is true of aluminum and various amounts of scrap are also used by producers of bronze, copper, lead and zinc.

Individual companies are deriving numerous benefits from scrap-salvage programs, as well as helping assure future adequate supplies of basic metals. One firm salvaged approximately 1,000,000 lbs. of dormant steel, discovered numerous re-usable components and freed valuable space to expanding operations.

Burlap

The outlook for this material is greatly improved as the result of India's decision to cut in half the export duty on hessian goods.

For two years burlap has been losing ground in the packaging field, it is generally agreed, because the export duty on burlap created non-competitive high prices.

Special food cartons

Production of special food cartons and paper pails is expected to approximate the 1951 level, according to a report made by industry representatives to NPA. At present, raw-material supplies appear to be in balance with demand and this status is expected to hold during the rest of the year.

The industry committee has asked NPA to remove its products—paperboard containers for butter, shortening, bakery products, ice cream, frozen foods, etc.—from the inventory restrictions of NPA Regulation I.

Unit shipments

The Army is studying a plan whereby trailers of standard commercial design can be loaded in inland cities, hauled by motor vehicles to shipside and be lifted aboard freight vessels as deck cargo. At a foreign port, trailers will be taken to destination by motor vehicle.

Defense aid

A national advisory board and regional advisory boards to the Small Defense Plants Administration will speed and coordinate on-the-spot service and assistance to small firms in all parts of the country.

Telford Taylor, SDPA administrator, is chairman of the national board. Membership of the board will include industry vice chairmen from regional boards, now being set up in major industrial areas.

HELPFUL FREE LITERATURE

EQUIPMENT • SUPPLIES • SERVICE

The literature and samples described here contain valuable data that will help increase the operating efficiency of your business.

After selecting the items you want, merely circle the corresponding numbers on the post card, fill in the information requested, and mail.

SPECIALTY BAG MACHINERY. Folder on converting equipment for printing and making of multiwall bags of various styles and sizes. Potdevin Machine Co. (D-251)

"PRINT-AD-STRING." details on a tough, non-woven, cotton industrial tape which may be printed with brand-name, slogan, coding or footage indication. Chicago Printed String Co. (D-252)

FIBREBOARD BOXES. Handbook designed especially for the users of corrugated and solid fibreboard boxes and products. Gives general specifications and rules for the construction, closure and use of fibreboards. Robert Gair Co., Inc. (D-253)

UNITIZED BELT CONVEYORS. Bulletin on standardized, interchangeable conveyor units which find many uses in packaging and materials handling operations. Island Equipment Corp. (D-254)

VACUUM FILLING MACHINES. Specification sheet containing data on straight-line vacuum filling machines with two to twelve valves for precision filling of a variety of containers. Perl Machine Manufacturing Co. (D-255)

SLITTER. General description and specification sheet on a slitter for film, tape and foil which operates both by razor blade cutting and rotary burst cutting. John Dusenberry Co., Inc. (D-256)

PACKAGING MACHINES. Bulletin gives brief descriptions of various filling, packing and weighing machines including units for filling and sealing tubes, jars and bottles, for filling cases, for packing flour, net weighing, etc. Arenco Machine Co., Inc. (D-257)

"KROMEKOTE" GIFT WRAPS. Booklet contains sample swatches of "Kromekote Colorcast" paper in several attractive colors in the new gift wrap weight. The Champion Paper & Fibre Co. (D-258)

CORNER STAYERS FOR PAPER BOXES. Bulletin describes functions of two machines that form and moisten gummed stays and apply them to box corners. Specifications are included. M. D. Knowlton Co. (D-259)

"DAY-GLO" FLUORESCENT COLORS. Sample folder shows five popular "Day-Glo" fluorescent colors. Gives suggested uses and explains licensing procedure. Switzer Brothers, Inc. (D-260)

"ALCOA" PULVERPROOF CLOSURES. Bulletin explains the use of rolled on closures which cannot be opened without showing signs of use and machines for applying them. Aluminum Company of America. (D-261)

SEALING CORRUGATED BOXES. Discussion of the methods for sealing corrugated shipping boxes with tape, glue, metal staples, straps, and wires. Contains many helpful ideas. The Hinde & Dauch Paper Co. (D-262)

SCALES FOR PRECISION WEIGHING. Various "Shadograph" scales for precision weighing are discussed with their complete specifications and illustrations. The Exact Weight Scale Co. (D-263)

FILM WRAPPER. Bulletin describes the "Strand" semi-automatic fine crease wrapper for wrapping articles of any shape in cellophane and other films. Charles E. Douglas & Co. Ltd. (D-264)

METALIZED PLASTICS. Acetate and polystyrene sheet material for packaging use which have been supplied with metalized finishes, opaque coatings, transparent tints, iridescent finishes and multicolor printing are illustrated in a sample folder issued by Coating Products. (D-265)

COLLECTORS AND PACKERS. Description of automatic machines that group boxes, bags, and cans and insert them into shipping cartons. Illustrations included. Standard Knapp, Div. of Emhart Mfg. Co. (D-266)

MACHINE FOR PRODUCING FABRIC OR PAPER LABELS. Leaflet describes the Model 120 bench model equipment for producing complete paper or fabric labels from rolls of blank stock. Markem Machine Co. (D-267)

ROLL CHANGING. Description of "The Kohler System" for changing unwind and rewind rolls of web material without reducing the speed of the process. Dilts Machine Works, Div. The Black Clawson Co., Inc. (D-268)

BANDING AND BUNDLING EQUIPMENT. Folder describes two new machines designed especially for automatic volume bundling and reinforcing of cartons and containers, and bundling of elongated materials and other large units using high-strength filament tapes. The Guide Co. (D-269)

POLYSTYRENE CONTAINERS. Folder illustrates and gives the sizes of 88 different polystyrene containers which can be obtained from stock molds without any die cost to the user. Bradley Associates, Inc. (D-270)

SAFETY SEAL AEROSOL VALVES. Permanent shelf-life valves for containers of insecticides, deodorants, aromatics, etc., are described in a folder by The Dill Manufacturing Co. (D-271)

CARTONING MACHINE. Folder illustrates and describes the "Caco" Model 40, a low cost, almost completely automatic machine with which one operator can seal thirty to sixty cartons a minute. Container Equipment Corp. (D-272)

"FLEXCEL" LIDS AND GLASS CONTAINERS. Bulletin on "Flexcel" polyethylene reusable snap-on covers which effect air and liquid tight double seals on glass containers. Buckeye Molding Co. (D-273)

Fill out and mail this card now

MODERN PACKAGING

Manufacturers' Literature Service

I am interested in the following items:

D-251 D-252 D-253 D-254 D-255 D-256 D-257 D-258 D-259 D-260 D-261
D-262 D-263 D-264 D-265 D-266 D-267 D-268 D-269 D-270 D-271 D-272
D-273 D-274 D-275 D-276 D-277 D-278 D-279 D-280 D-281 D-282 D-283
D-284 D-285 D-286 D-287 D-288 D-289 D-290 D-291 D-292 D-293 D-294

If you do not now subscribe to MODERN PACKAGING, but wish to receive the next 12 issues (\$5 everywhere), just check here ☐

NAME POSITION
(Please Print Plainly)

COMPANY

STREET CITY STATE

(Not valid after July 18, 1982)

HELPFUL FREE LITERATURE

EQUIPMENT • SUPPLIES • SERVICE

The literature and samples described here contain valuable data that will help increase the operating efficiency of your business.

After selecting the items you want, merely circle the corresponding numbers on the post card, fill in the information requested, and mail.

MILITARY PACKAGING SPECIFICATIONS. Booklet explains more commonly used government packaging specifications. Gives detailed breakdown of various subsections, and lists materials required. Vant Products, Inc. (ID-274)

SYLVANIA CELLOPHANE. A complete price list on both moisture proof and non-moisture proof rolls and sheets, along with general information regarding the correct ordering process. Sylvania Div. American Viscose Corp. (ID-275)

CUSHIONING MATERIAL. Details on "Celluliner," a new interior packaging cushioning material with four times the packaging protection of creped wadding. The Gilman Brothers Co. (ID-276)

PACKAGING MACHINES. Folder contains details on "Bar-Nun Auto Check" weighers and automatic bag feeders, openers and weighers, plus testimonials from users. B. F. Gump Co. (ID-277)

SARAN FILM. Covered are the characteristics, features, applications, and availability of Saran transparent film. The Dow Chemical Co. (ID-278)

SEMI-AUTOMATIC LABELERS. Complete specifications, and other pertinent data about the Model S semi-automatic labeler for affixing front and back labels, all-around labels, neck labels, to all sizes of containers. Economic Machinery Co. (ID-279)

FILLING MACHINES. Several models of Anderson filling machines for bottles, tubes, jars, cans and other containers are described in a bulletin issued by Anderson Bros. Mfg. Co. (ID-280)

WRAPPING ROUND CONTAINERS. Technical service bulletin illustrates all current machines for automatic or semi-automatic labeling of glass jars, bottles, tin cans, and fiber bodied cans. Lists Paisley labeling adhesives and labeling methods. Paisley Products, Inc. (ID-281)

WAXES FOR INDUSTRY. Folder discusses uses of microcrystalline and other waxes in the paper converting industry and other industrial outlets. Bareco Oil Co. (ID-282)

PACKAGING EQUIPMENT. Folder describes the various types of standard and special packaging equipment manufactured by Package Machinery Co. (ID-283)

VEGETABLE PARCHMENT PAPER. Informative booklet gives background information about this high-wet-strength and grease-resisting packaging material. Covers method of manufacture, physical properties, and recommended applications in the packaging of foods, drugs, and other products. Paterson Parchment Paper Co. (ID-284)

SHOCK-ABSORBENT PACKAGING. Profusely illustrated booklet shows how to employ "Kimpak" creped wadding as protective inner packaging for pharmaceuticals, fragile products, machinery, and so forth. Kimberly-Clark Corp. (ID-285)

"ALATHON" POLYTHENE RESINS. Booklet explains properties of "Alathon" polythene resin as they pertain to the packaging of foods, pharmaceuticals, cosmetics, chemicals and other products. Lists forms available. E. I. du Pont de Nemours & Co., Inc. (ID-286)

"CLEARSITE" PLASTIC CAPSULE VIALS. Descriptive folder contains price list of various sizes of "Clearsite" capsule vials with polyethylene closures. Celluplastic Corp. (ID-287)

BAKELITE RESIN COATINGS. Booklet covers the entire scope of surface coatings based on formulations containing Bakelite resins. Tells factors to be considered in the use of modern coatings and has a chart listing the qualities imparted to coatings by various types of resins. Bakelite Co., Div. of Union Carbide and Carbon Corp. (ID-288)

"PERVENAC" LABELS. Bulletin containing a list of products on which "Pervencac Thermokote" labels are suggested for use. Includes printing and varnishing tips for these labels. Nashua Gummed and Coated Paper Co. (ID-289)

MARGIN AND CARTON GLUER. Bulletin on the "Glumaster" margin and carton gluer for applying latex, resin and cold or hot glues as a strip or to a margin from 1/8 to 5 inches wide. Kenneth J. Moore & Co. (ID-290)

ROTARY ANILINE PRINTER. Specification sheet on a printer designed for coupling to bag making, sheeting and re-reeling machines, for printing up to six colors. Hol Bag, Inc. (ID-291)

PHARMACEUTICAL AND TABLETING EQUIPMENT. Broadside folder describes the full line of Colton pharmaceutical, tableting and packaging equipment including tableting presses, tablet counters, mixers and the like. Arthur Colton Co., Div. of Snyder Tool & Engineering Co. (ID-292)

CARTONING. Report on the cost of cartoning by hand compared to cartoning by machine. Nine group studies are classified by types of operations, permitting direct comparisons with similar operations. R. A. Jones & Co., Inc. (ID-293)

WRAPPING CONFECTIONERY PRODUCTS. Descriptive sheet presenting the "Wrap-O-Matic" Model RA for wrapping confectionery products. Mechanical and operational data, illustrated sizes and shapes of products wrapped, and list of present users are included. Lynch Corp. (ID-294)

Fill out and mail this card now



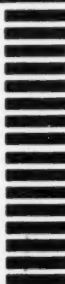
BUSINESS REPLY CARD

First Class Permit No. 2656 (Sec. 34.9, P. L. & S.J., New York, N. Y.)

MODERN PACKAGING

575 Madison Avenue

NEW YORK 22, N. Y.





Portrait of Beauty



Introduction of Studio Girl Creme Shampoo in Sheffield Process collapsible tubes met instant acceptance—proving once again that to foster the image of ideal beauty held in the hearts of American women is a potent key to sales success.

A modern and genuine beauty aid... an inspired name... and collapsible tubes that are tops in convenience, safety and efficiency—that's a combination engineered to better promote the sales potential of your product.

An exclusive Sheffield Process makes it possible to package this shampoo in lightweight aluminum tubes. For details, call or write your nearest Sheffield representative.

The Sheffield Tube Corporation

Home Offices: New London, Connecticut
Sales Offices: New York • Chicago • Los Angeles

U. S. patents digest

This digest includes each month the more important patents of interest to those who are concerned with packaging materials. Copies of patents are available from the U. S. Patent Office, Washington, at 25 cents each in currency, money order or certified check; postage stamps are not accepted.

Edited by H. A. Levey

Bag Closure, A. E. Schenck (to Bemis Bro. Bag Co., Minneapolis, Minn.). U.S. 2,582,286, Jan. 15. A collapsed gusset bag wherein top of bag is composed of front, rear and edge walls and wherein edge walls are interlocked between front and rear walls.

Cooky Bag, C. D. Mullinix, Los Angeles, Calif. U.S. 2,582,346, Jan. 15. A bag comprising a tubular envelope consisting of transparent front and back walls connected at their sides along a single fold line when in flat position, a substantially rectangular stiffening sheet having inherently the same stiffness in all directions of bending and being disposed within said envelope and attached to back wall thereof.

Carton Blank Handling Machine, L. Perilli, Waltham, Mass. U.S. 2,582,393, Jan. 15. In a device for setting up box blanks wherein each blank has a bottom and side walls folded inwardly thereon to nearly prone positions with their top edges closely parallel, a place of setting up for receiving a flat blank.

Tape-Dispensing Device, A. P. Krueger (to Derby Sealers, Inc., Derby, Conn.). U.S. 2,582,705, Jan. 15. In a machine for feeding pressure-sensitive tape, a frame, feeding means rotatably mounted thereon, including a tape-advancing member having a surface to which the tape adheres.

Bottle Closure, A. I. Rishkind (to A. B. Dick Co., Chicago, Ill.). U.S. 2,582,721, Jan. 15. A closure comprising top-wall, threaded skirt depending from top wall for threaded engagement with outer wall of neck of container, a tubular sleeve concentric with skirt depending from inner portion of top wall.

Dispenser For Pressure-Sensitive Tape, T. W. Berridge and H. F. Nordheim, Waltham, Mass. U.S. 2,582,813, Jan. 15. In a tape dispenser, a casing having means for supporting a roll of tape and also having remote therefrom adjacent the exterior of the casing an abutment to support the end of a length of tape withdrawn from roll with said length extended between the roll and abutment, over which abutment end of tape is fed to outside of dispenser for severance and removal.

Container For Liquids, W. M. Flanning (to Eskimo Pie Corp., Bloomfield, N. J.). U.S. 2,583,211, Jan. 22. A container for fluids and other materials consisting of a body closed at its base, a closure for upper end of container consisting of a flanged sheet formed with a closure member by spaced cuts at opposite sides of a hinge line, closure having a cap-like portion extending downwardly into a flange of the sheet.

Hinged Box, H. J. Witzgall (to General Electric Co., a corporation of New York). U.S. 2,583,350, Jan. 22. A box comprising a body and a cover connected by a hinge including a hinge leaf, a recess in rear wall of box opening on inner surface and upper edge of wall, inwardly extending lips along the side of said recess in spaced relation to the back wall of recess, said hinge leaf comprising a generally flat sheet-metal stamping positioned in recess and having laterally extending offset serrations received between lips and rear wall in recess.

Closure Member, N. Zepelovitch (to Nahum A. Bernstein, New York, N. Y.). U.S. 2,583,460, Jan. 22. A closure member for a container having a body portion and a narrow neck portion, including a supporting structure carrying a deformable sealing membrane, a pair of retaining arms guided by bores within said supporting structure and passing through and attached to said membrane, retaining arms being manually displaceable internally of said container against the restoring action of membrane.

Tube-Trimming and Piercing Machine, H. F. Temple (to Victor Industries Corp., Brooklyn, N. Y.). U.S. 2,583,521, Jan. 22. In a tube-trimming machine, a revoluble mandrel constituting a first support means for a generally cylindrical tube having one closed end and the other end open, tube normally hanging

eccentrically on mandrel, a revoluble tool, means for moving tool toward and from mandrel to press tube therebetween.

Boxmaking Machine, R. J. Gaubert and S. Marvin (to Simplex Packaging Machinery, Inc., a corporation of California). U.S. 2,583,641, Jan. 29. In a boxmaking machine, a folding station for receiving a blank to be folded to box form and including a detachably mounted apertured folding member of rectangular contour, a heat-sealing station comprising four angle-shaped sealing members mounted in alignment with corners of aperture.

Carton, A. B. Storey (to Celanese Corp. of America, a corporation of Delaware). U.S. 2,583,672, Jan. 29. A carton comprising side wall, a pair of flaps of unequal width extending from lower edge of two opposite side walls and forming a bottom cover for said carton, flaps lying in a common plane with their opposed free edges in substantially abutting relation.

Carton, A. B. Storey (to Celanese Corp. of America, a corporation of Delaware). U.S. 2,583,673, Jan. 29. A carton comprising a pair of flaps of unequal width extending from lower edge of two opposite side walls and forming a bottom cover for carton, said top flaps lying in a common plane with their opposed free edges in substantially abutting relation, bottom cover being spaced from edges of other two opposite side walls to form slots.

Device For Feeding Closure Caps To Containers, E. H. Lyon (to Bernardin Bottle Cap Co., Inc., Evansville, Ind.). U.S. 2,583,700, Jan. 29. In a device for delivering closure caps to progressively conveyed containers, the combination with an inclined runway for guiding caps in side-by-side succession for gravitation from its lower end, of holding means below, and for receiving caps from the runway, by which the cap will be stationarily retained at an angle with its leading portion in the path of and directly engageable and displaceable from the holding means by the container.

Folding Machine, A. F. Shields (to S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y.). U.S. 2,583,712, Jan. 29. In a folding machine for forming flat collapsed tubular box blanks from flat and scored sheets, said sheets having a pair of longitudinally extending side sections defined by score lines and foldable about said score lines into collapsed tubular arrangement, stop member mounted on machine, means for moving blanks successively against stop members, means for folding over the side section.

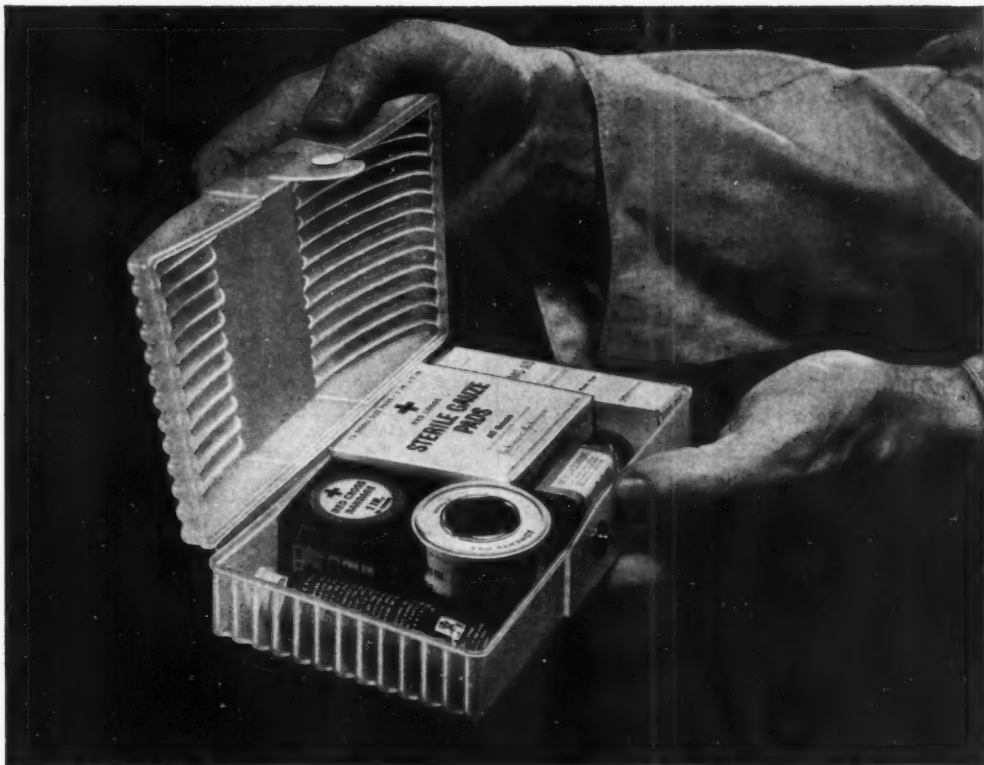
Feeding Mechanism For Folding Machines, A. F. Shields (to S & S Corrugated Paper Machinery Co., Inc., Brooklyn, N. Y.). U.S. 2,583,713, Jan. 29. In apparatus for successively feeding the bottom sheet in a plane parallel to said sheet from a stack of said sheets, a platform supporting the stack sheets.

Labeling Machine, N. Beck (to The Crown Cork Co., Ltd., Southall, England). U.S. 2,583,807, Jan. 29. A labeling machine comprising in combination a pair of suction pad arms, a spindle means for pivotally mounting said arms on spindle to rotate therewith and with respect thereto, spring means for urging said arms about spindle towards each other, means for transporting spindle and arms from a stack of labels through a gumming device to a bottle or the like at a labeling station.

Apparatus For Vacuumizing, Gassing and Closing Containers, R. M. Mero (to Continental Can Co., Inc., New York, N. Y.). U.S. 2,583,866, Jan. 29. A vacuumizing apparatus including a casing and a peripherally pocketed rotor, means for drawing a vacuum in the rotor pockets and including a vacuum chamber formed in said casing, a closing apparatus including a casing providing a closing chamber, a rotary turret means for closing cans in closing chamber.

Tubular Container, C. E. Slaughter (to Extruded Plastics, Inc., Norwalk, Conn.). U.S. 2,584,095, Jan. 29. A tubular container comprising a self-supporting tube made from flexible thermoplastic, said tube having straight side walls and having its end closed by a disk-like closure made of flexible thermoplastic and provided with a peripheral flange fitting within said tube.

Machine Which Fills Groups of Containers, a Group At a Time With Conveyor Which Stops During Filling Operation, J. L.



New first aid kit of Du Pont "ALATHON" has self-hinge . . . is molded in one piece

It's another packaging improvement made possible by the outstanding properties of "Alathon"

Lid, hinge and tray—all three parts of this new first aid kit are molded in one piece of Du Pont "Alathon" polythene resin. Specifically designed for the self-hinge feature, "Alathon" had the necessary properties to mold the kit successfully.

"Alathon" is strong and tough—even in flexible sections as thin as this hinge. Flexed time after time, the hinge remains unharmed. And "Alathon" is readily molded into intricate shapes. This kit, for example, features a ribbed lid, the hinge, and a ribbed, sectioned tray—all molded in one piece in one operation.

"Alathon" contains no plasticizer yet combines light weight and toughness even in thin sections. It is odorless, tasteless, non-toxic, and inert to most packaged goods at room temperatures. Because of this unique combination of properties, "Alathon" is used for many different applications in the packaging industry. Closures and other components are economically injection-molded of "Alathon" to close tolerances. In addition, "Alathon" is widely used as a coating for paper. Blended with waxes, it improves the heat-sealing characteristics, appearance and scuff-resistance of waxed papers.


We suggest you investigate the properties of "Alathon" for your future packaging application. We'll gladly discuss the availability of

quantities for development work. For further information, write:

E. I. du Pont de Nemours & Co., Inc.
Polychemicals Department
350 Fifth Avenue, New York 1, New York
7 S. Dearborn Street, Chicago 3, Illinois
845 E. 60th Street, Los Angeles 1, California

Kit molded by Auburn Button Works, Auburn, N.Y.
for Johnson & Johnson, New Brunswick, N. J.

*REG. U.S. PAT. OFF.



BETTER THINGS FOR BETTER LIVING
... THROUGH CHEMISTRY

Polychemicals
DEPARTMENT
PLASTICS • CHEMICALS

where ELSE can you USE PRINT-AD-STRING the "TIE that TALKS"?

REG. U. S. PAT. OFF.

Tie up your products with Print-Ad String, and wherever they go they tell people your name or slogan, they give directions, they measure footage, they provide grade markings—they tell whatever you want told . . . and tell it in a novel, colorful way.

Here's a tremendously strong COTTON tie—in thicknesses down to .003, widths down to 1/4", in any color or combination of colors you want—a tie that won't mar or dent the edges of articles tied in it—won't slip in the knot—won't stretch—and adds a smart touch to your package.

Mighty useful for manufacturing short-cuts, too. Be informed! Mail coupon now for FREE booklet full of valuable ideas!

BETTER TYING



Holds parts firmly for assembly, cutting, drilling . . . Holds parts in finished assemblies . . . Measures running footage . . . Gives directions, grade marks, identifications.

BIG HELP IN THE PLANT

Good-looking all-cotton ties! . . . Flat, won't mar or dent edges of boxes or merchandise . . . Won't slip in the knot . . . Non-stretch, great strength . . . Also used as rip-cord opener, from candy bars to survival kits . . . Ties anything!



MAIL FOR FREE IDEA BOOK!



Dept. D—Chicago Printed String Co.
2300 Logan Blvd., Chicago 47, Ill.

GENTLEMEN: Without cost or obligation send me your FREE Idea Book.

My Name _____
Title _____
Company _____
Address _____
City _____ State _____

U. S. patents digest

Ferguson and R. C. Talbot (to J. L. Ferguson Co., Joliet, Ill.). U.S. 2,584,338, Feb. 5. A machine for filling containers with comminuted material comprising a supporting framework, a horizontal passageway formed in framework for passage of containers therethrough, an endless flat-surfaced conveyor belt in machine with its upper flight forming floor of passageway to carry containers upright in serial contact through passageway.

Bottle And Closure, S. J. Wolf (to Schenley Industries, Inc., New York, N. Y.). U.S. 2,584,522, Feb. 5. A bottle having a body and a neck extending upwardly therefrom and integrally formed with an outstanding circumferentially extending bead spaced upwardly from its lower end, said bead gradually increasing in thickness towards its lower edge to form the bead with a circumferential surface extending downwardly at an outward incline, then inwardly to form a lower edge face constituting a shoulder, a cork collar fitting tightly about said neck.

Apparatus For Making Tubular Paper Containers, J. H. Brown, Jr. (to Lily-Tulip Corp., New York, N. Y.). U.S. 2,584,542, Feb. 5. Apparatus for making receptacle bodies from blanks of paper or like sheet material, the combination of mechanism for prefolding blank into approximate body form including a pre-folding receptacle having a longitudinally extending fixed wall peripherally disposed about its longitudinal axis and provided with a relatively narrow longitudinally extending mouth.

Egg Carton, M. H. Kowal (to Empire Box Corp., Garfield, N. J.). U.S. 2,584,595, Feb. 5. An egg carton having two rows of egg cells with six cells in each row formed from a single, substantially oblong-shaped blank scored along the longitudinal center line thereof.

Container With Fused Reinforced Seam, C. A. Southwick, Jr. (to Shellmar Products Corp., Mt. Vernon, Ohio). U.S. 2,584,633, Feb. 5. A pouch which comprises superposed sheets of polyethylene, marginal portions of said sheets being fused together into a unitary mass to provide a seam construction for said pouch with remaining portions providing pouch walls.

Paperboard Partitioned Article Carrier, E. L. Arneson (to Morris Paper Mills, Chicago, Ill.). U.S. 2,584,658, Feb. 5. An article carrier fabricated of flexible stock comprising pairs of side and end walls hingedly connected to one another along parallel margins, having a partitioned structure comprising a pair of inner partition panels integrally connected to one another by a fold line along top of structure.

Bottle Carrier, T. W. Foster (to Container Corp. of America, Chicago, Ill.). U.S. 2,584,689, Feb. 5. A bottle carrier comprising a paperboard carrier set up from a one-piece blank and having side walls, flaps extending from ends of side walls, a two-section interior wall and handle-receiving pockets.

Container Assembling Apparatus, G. H. Laabs (to Morris Paper Mills, Chicago, Ill.). U.S. 2,584,718, Feb. 5. An assembling device comprising a support, a contractible clamping ring mounted on support, means to contract clamping ring, a clamping and assembling head, means connected to head to support for relative movement of last-named ring to and from generally concentric assembling relation.

Power-Operated Hydraulic Sealer And Crimper, L. L. Salfisberg (to Ivers-Lee Co., Newark, N. J.). U.S. 2,584,815, Feb. 5. A machine comprising a frame casting, relatively movable jaws mounted thereon to receive between them material to be pressed, mechanism for closing said jaws comprising a main operating device including a piston in a cylinder.

Box Folding Machine, W. P. Fergnani (to Post Machinery Co., Beverly, Mass.). U.S. 2,584,855, Feb. 5. A box-blank folding machine comprising a pair of carrier belts having opposed reaches for engaging one longitudinal margin of a blank therebetween and feeding it longitudinally along a predetermined path, parallel with the reaches, with opposite longitudinal margin of blank extending laterally beyond said reaches.

Packaging Tray, N. J. Watson and J. C. Roche (to Chicago Carton Co., Chicago, Ill.). U.S. 2,584,967, Feb. 5. A partition tray comprising integrally connected side panels, bottom ledges and transverse panels, said side panels being foldably connected to the ends of bottom ledges, transverse panels being foldably connected to sides of bottom ledges, transverse panels being provided with slits for receiving portions of side panels.

Bottle-Dispensing Apparatus, E. C. Johnson (to The Vendo Co.,

THERE IS MORE THAN ONE WAY TO..

Save



Many banking institutions, like the Society for Savings in the City of Cleveland, furnish such convenient banks to their depositors for an easier way to save those elusive coins. Ideal, too, to save for church or charity appeals.

THE USE OF CLEVELAND CONTAINERS
IS ANOTHER WAY TO SAVE
in packaging endless products.

You obtain flexibility in packing; shipping at lower costs; individuality in new, eye-compelling designs; protection against careless handling.

FAST PRODUCTION FACILITIES . . . PROMPT DELIVERIES . . .
FROM OUR STRATEGICALLY LOCATED PLANTS.

Send for our latest literature . . . full of money-saving suggestions.

The **CLEVELAND CONTAINER Co.**

6201 BARBERTON AVE. CLEVELAND 2, OHIO

• All-Fibre Cans • Combination Metal and Paper Cans
• Spirally Wound Tubes and Cores for all Purposes

PLANTS AND SALES OFFICES: Cleveland, Detroit, Chicago, Plymouth, Wisc.,
Jamesburg, N. J., Ogdensburg, N. Y. • ABRASIVE DIVISION at Cleveland
SALES OFFICES: Grand Central Terminal Bldg., New York City; Washington
Gas Light Bldg., Washington, D. C.; West Hartford, Conn.; Rochester, N.Y.
Cleveland Container Canada, Ltd., Prescott, Ontario • Offices in Toronto and Montreal



CONVEY-O-MAT

tuck end carton set-up machine

with conveyor loading

Western Packaging
Exposition
August 12-14, Booth 308



Model 54 CONVEY-O-MAT discharges cartons 41" above floor. Occupies only 24" x 48" floor space.



Cuts labor costs



Runs wide range of carton sizes



Synchronizes with your production line



Fast change-over time



3500 cartons per hour output



Low initial cost

Model 54 CONVEY-O-MAT delivers the set-up carton in an upright position on the conveyor ready to receive your product. Attendant can help load product or inserts in her spare time.



Model 50 TUCK-O-MAT delivers set-up tuck end cartons to your container or packing table.

SEND US YOUR CARTONS AND OUR ENGINEERS
WILL GLADLY MAKE RECOMMENDATIONS



Machinery Mfg. co. inc.

2431 Dallas Street, Los Angeles 31, California
Dist. by New Jersey Machine Corp., Hoboken, Cincinnati, Chicago, Los Angeles

U. S. patents digest

Kansas City, Mo.). U.S. 2,585,011 and 2,585,012, Feb. 12. In a vending machine having supporting and guiding means for receiving two columns of articles in staggered relationship, a reciprocable roller disposed below the columns of articles and adapted to engage the columns alternately to restrain both columns from downward movement.

Machine For Electrically Sealing Fibre Containers. H. T. Odquist and E. W. Macoy (to American Can Co., New York, N. Y.). U.S. 2,585,031, Feb. 12. In a container-closing machine for securing with an interposed thermoplastic adhesive a fibre container cover in place within a fibre container body by an interfolding of marginal cover flange parts with projecting annular flange parts of the container body and against a shoulder formed by an inwardly extending bead in the body; retainer jaws holding container and a timing switch operable on electric means to retract jaws, creating an electrostatic field passing through a thermoplastic adhesive for dielectrically heating and melting said adhesive for bonding interfolded container and cover parts together.

Carton Set-Up Machine. L. E. Arneson (to Morris Paper Mills, Chicago, Ill.). U.S. 2,585,074, Feb. 12. A machine for setting up collapsed cartons characterized by a pair of opposed side walls connected by a fold line and a bottom extending between and hinged to side walls on further fold lines, mechanism for manipulating folded end-wall panels to opened and interlocked set-up position.

Box-Blank Handling Machine. J. Bandura, R. J. Baisley, J. Pfeffer and C. D. Keely (to General Corrugated Machine Co., Inc., Palisades Park, N. J.). U.S. 2,585,076, Feb. 12. In a box-blank receiving, stacking and delivering device, a stable for receiving blanks flatwise and having antifriction blank-supporting element therein, a first target against which the leading edge of each blank impinges, a rebound target opposite first target and a vertically extending pusher device on carriage and between said targets, means to move same to eject stacked blanks.

Box For Displaying Contents. M. M. Tierney, St. Paul, Minn. U.S. 2,585,056, Feb. 12. A box made of folded sheet material, the same being rectangular in transverse cross section and having a bottom portion swingable downwardly about one edge thereof, said box having an opening adjacent bottom in the side opposite edge, said front being swingable about the edge of bottom opposite first-mentioned edge and means for holding front portion in swung position.

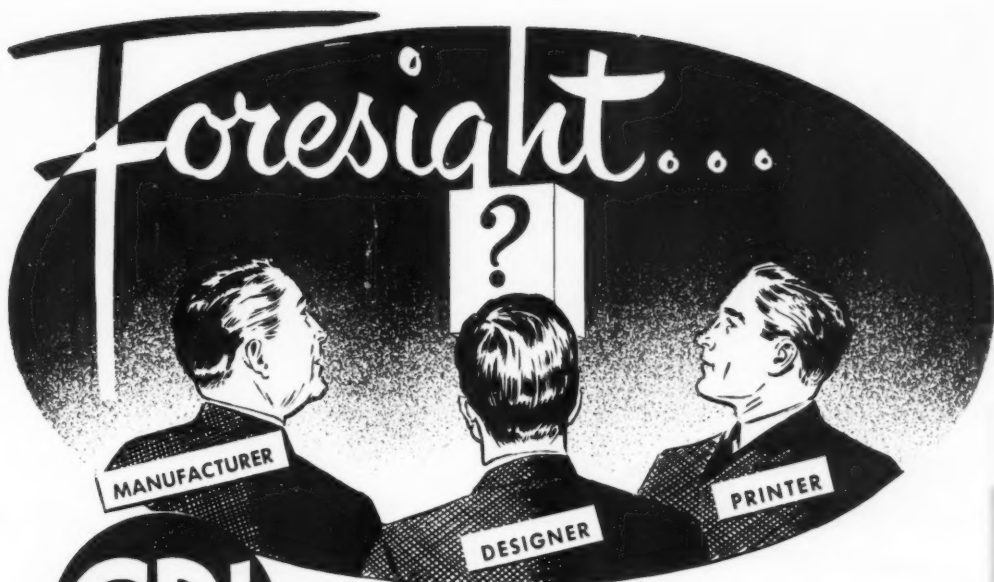
Carton Set-Up Machine. J. J. Wetzler (to Shellmar Products Corp., Chicago, Ill.). U.S. 2,585,201, Feb. 12. In a carton set-up machine, a bed along which flat, knock-down cartons are adapted to be advanced as a series in front to rear edge engagement with one another, a hopper supplying said cartons gravitationally.

Elastic-Closure Fruit Bag. F. Belmont, Anaheim, Calif. U.S. 2,585,214, Feb. 12. A bag for the packaging of fresh fruits and vegetables comprising a sheet of thin transparent film joined together at side and bottom and having an opening at top, a ribbon elastic secured to top of sheet and having its edges folded on both sides of sheet, ribbon elastic tending to bias edges of opening towards a partially closed position.

Machine For Applying Tape To Cylindrical Containers. J. G. Jones and L. A. Ulmschneider (to Eastman Kodak Co., Rochester, N. Y.). U.S. 2,585,250, Feb. 12. A machine for applying tape to cylindrical containers comprising a chute, an intermittent feed for moving containers one at a time from chute, containers being moved to a supply of tape which has an adhesive side and secured by a vacuum action.

Thread For Glass Containers. R. V. Bromley (to Hazel-Atlas Glass Co., Wheeling, W. Va.). U.S. 2,585,624, Feb. 12. A glass container adapted to be sealed with a screw cap, a one-piece finish on container including a continuous glass thread on neck of container, an odd number of evenly spaced depending portions along the continuous thread, bottom of depending portions being arranged in a helix.

Machine For Inverting Containers. W. O. Sommer and E. I. Leeder and C. L. Sollins (to Borden Co., New York, N. Y.). U.S. 2,585,697, Feb. 12. A machine for inverting rigid food containers comprising a generally horizontal support for containers in upright position, with a terminus of the support at the point of beginning of the inversion of the containers.



INKS for PACKAGE PRINTING

When a package is being designed that is the time to consult your printer and ink maker. They know the type of printing ink that will be best suited for each particular job. Foresight at this point can save time and money.

HYDRY

made by GPI is a moisture-setting ink that prints bright and clean in a full range of brilliant colors. Many food, confectionery, tobacco and drug packaging problems are eliminated by the use of this ink which *dries quickly*. HYDRY is a real time and money saver since waxing, folding or die-cutting operations can be started as soon as sheets come off the press . . . and no storage time is needed for drying.

ANILINK

made by GPI is a 100% pigmented ink for aniline printing on plain or coated paper, board, cellophane, glassine, acetate, foil and other materials. You will find that ANILINK has the necessary color strength to produce opaque results. It performs well on the press and gives clean, sharp and glossy prints. You can get ANILINK in colors to match your sample — in pastel or brilliant tones.

GRAVURE

inks made by GPI can't be beat for long run multi-color printing of labels, wrappers, bags and folding boxes on a wide variety of paper stock, ranging from manila to pasteboard, cellophane, foil and glassine. You can depend on GPI GRAVURE INKS to have the consistency and drying speed required to give dense solids and bring out fine detail.

If your requirements involve special formulations or any inks not listed here, please write us. We are at your service for complete information on ink and color.

GENERAL PRINTING INK COMPANY

DIVISION OF SUN CHEMICAL CORPORATION

10th STREET & 44th AVENUE • LONG ISLAND CITY 1, N. Y.

Offices in Principal Cities.

SAVE 50% PRODUCTION COST

ANILOX
PRESSES
2, 3, 4 COLOR

MANHASSET
Does the Job Right!

MEETS ALL REQUIREMENTS

GIVES UTMOST PRODUCTION

HANDLES VARIETY OF STOCK

SKILLFULLY DESIGNED

CARRIES THE LOAD

MANY SATISFIED USERS

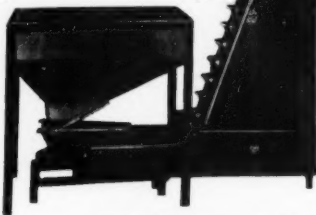


MANHASSET MACHINE CO.
MINEOLA, N. Y. • Garden City 7-7560

Robo-Lift

*Standard
Elevating Conveyor*

Increases production on
present processing
equipment . . . and
LOWERS YOUR COST!



Simplified . . .
economical . . .
made possible
by development
of special
buckets which
interlock and
form a series
of pockets into
which your
product is fed.

**NO SPILLING
NO BREAKING**

Requires floor space only 24" x 66"
Only stainless steel contacts product

COUNSEL MACHINE COMPANY, INC.

8 Hathaway Street
Wallington, New Jersey

Brochure available . . . Write now!

**LOOK
TO**

HOWARD
CONTROLLED POLYETHYLENE
PLASTICS

.....for...

Howard Seal controlled polyethylene plastic bags are the finest obtainable. They are moisture-proof, fracture-proof, and unaffected by temperature changes. You can absolutely depend on their uniformly high quality . . . Look to Howard for these outstanding features:

1 Converted from flat tubing, Howard Seal bags are seamless and guarantee complete sterility inside for packing processed foods. New production methods absolutely eliminate pinholes.

2 Controlled as to size, strength, thickness, sealability, and chemical inertness — You can depend on the uniformity of each shipment of Howard plastic bags . . . And they will conform to your most rigid specifications.

3 Now Howard has finally solved the problem of perfect printing. New methods keep your printed message on the package . . . will not crack, pull or rub off. Unaffected by changes in temperature or moisture.



STERILE — SEAMLESS TUBING



**CONTROLLED
UNIFORMITY**



**PRINTING
THAT STAYS ON!**

HOWARD PLASTICS

Main Plant and Office:
Dept M-4, Council Bluffs, Iowa
Plants at:
Tucson, Arizona, and Kansas City, Missouri.
In Canada: Transparent Paper Products Co.,
5565 Cote St. Paul Rd., Montreal, Quebec.

WRITE TODAY FOR FREE SAMPLES AND LOW PRICES

MODERN PACKAGING

U.S. Automatic Machines

FILL YOUR PACKAGES BEST



THE MODEL TBS

For Automatic Tablet or Pill Counting and Filling

The fully automatic Model TBS fills bottles, cartons or bags, Scott Net Weighers and other rigid containers with any desired count of pills, tablets and capsules unerringly and rapidly. It mechanically counts and drops tablets into the container, producing up to 150 filled bottles or boxes per minute depending upon the count. Because of its unique and simple design, it may be economically, easily changed over to suit a wide range of requirements.



THE SCOTT NET WEIGHER

For Packaging Free-Flowing Materials

For weighing and filling free-flowing and semifree-flowing materials into cans, bottles, cartons or bags, Scott Net Weighers have no equal for speed and accuracy. A single Dump Scott Net Weigher will operate semiautomatically at speeds up to 35-40 packages per minute; automatic units up to 60 per minute. Scott Scales are made in several sizes and types to suit product and weight specifications.



THE BOND FILLING MACHINES

For Nonfree-Flowing, Powdered and Granular Materials

Semiautomatic and fully automatic high-speed Bond Fillers handle a wide range of nonfree-flowing or dusty materials, filling at speeds up to 120 packages per minute. Bond Auger Filling machines with one, two or four filling stations are available for volume filling, gross weighing or packing.



THE MODEL C-10-CC

For Cartoning Candy

This versatile machine is receiving wide acceptance in the candy industry. It is possible on the one machine to fill an entire range of candy items without the use of extra equipment provided the same size carton is used. The C-10-CC automatically opens flat folded cartons, tucks bottoms, cuts, forms and inserts liner, volume fills candy, then folds and tucks liner top flap of carton. The liner may be omitted when desired.

These and other machines manufactured by **US** will fulfill your requirements for packaging machinery. It will pay you to discuss your problem with **US** as it has the packers of the containers shown. Write **US** today.



NET & GROSS WEIGHING ★ PACKAGE FORMING & FILLING ★ CARTON SEALING, LINING, WRAPPING ★ BOX MAKING

AUTOMATIC BOX MACHINERY CO., INC.

Owning and Operating NATIONAL PACKAGING MACHINERY CO. ★ CARTONING MACHINERY CORP.

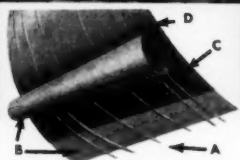
122 ARBORETUM ROAD, ROSLINDALE, BOSTON 31, MASS.

Branch Offices: New York ★ Cleveland ★ Chicago

"Snake Tape" seals 'em

STRONGER

in 1/3 less time



Sturdy cords (A) for strap-like strength. Two layers of select kraft (B) bonded with asphalt (C) to keep out wet. Best animal glue (D) for perfect seal. 100 yard rolls; 6 widths. Easily dispensed by "cut-off" type machines.



6 strips — non-reinforced tape



Save Time! Motion study photos show how sealing labor is cut two-thirds. Average time with 6 strips of non-reinforced tape — 38.5 seconds. Only 11 seconds with 2 strips of Snake Tape.

Sealed STRONGER
because Angier Snake Tape
is reinforced!

Sealed FASTER because
only 2 strips give more
than usual protection.

FREE 20 yard test sample . . . write

Angier

Angier Corporation, Framingham 11, Mass.
Industrial Protective Papers Since 1895
Distributors in Principal Cities

Carnation

(This article continued from page 102)
been sold against bottled milk. That the Carnation name had become synonymous with the highest quality in milk is reflected in the fact that the Fresh Milk and Ice Cream Division has now grown to nearly 50 processing and distributing plants, 16 of which are major production units.

In 1929 Carnation purchased the Albers Bros. Milling Co., whose cereals and feeds are well known in the West. This firm, now operated as the Albers Cereals and Feeds Division of Carnation, produced a line of processed breakfast and cooking cereals, Flapjack and Buckwheat pancake mixes, in addition to a complete line of livestock and poultry feeds.

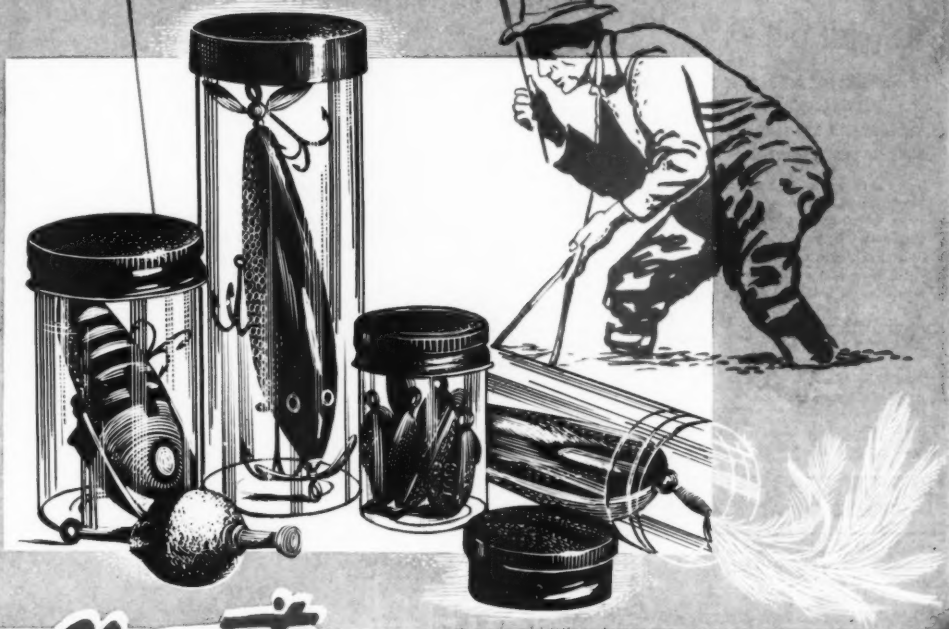
By coincidence, one of the products acquired was branded "Carnation Oats," but was discontinued in the domestic market under that name. In 1948, however, Albers Cornflakes was replaced by Carnation Cornflakes, an improved cereal produced under a new formula. The package design adopted was identical to that of the famous red-and-white Carnation Evaporated Milk label, except for copy. The Carnation brand identification proved its value; since its introduction, Carnation Cornflakes have made excellent progress in terms of both distribution and volume.

The third product bearing the red-and-white label and Carnation logo-type is Carnation Malted Milk brought out in 1934. This product is made in the company's plant at Oconomowoc, Wis., and is packed in 1-lb. and 5-lb. jars for home use and in larger sizes for commercial users. Except for copy, labels in the smaller sizes are duplicates of the evaporated milk label.

Although the Carnation brand identification has remained virtually unchanged since 1899, the company feels the future of its label is unlimited, should the decision be made to apply it to other products. The name, label and product behind it have achieved, through the years, a rare and priceless public confidence the world over. It is a prime example of the value of brand identification through packaging.

This franchise has been gained by maintaining unquestionable identity for over half a century, yet keeping pace with modern techniques. As an example of packaging quality control,

Lures that catch the Sportsmen!



Clearsite

Plastic Containers That Sell!
place your products on dress parade

Fishing for Sales? It's always good with products packed in Star Bright Clearsite Plastic Selling Containers. Lure the customers—catch their eye and watch 'em buy. And, Clearsite protects your products—compliments 'em. Keeps 'em at their sales best—on Dress Parade always! Clearsite is *Shatter-proof*—eliminates normal breakage—saves cost of container and contents! It's *Featherlight*—about 1/5 the weight of glass. Slashes shipping costs. For an open season in year 'round sales, send for descriptive literature—you'll save three ways.



Not genuine Clearsite unless stamped with CELLUPLASTIC name as shown.

ONLY Clearsite PLASTIC CONTAINERS GIVE YOU ALL THESE SALES FEATURES

Distinctive • Moisture-tight • Resistant to alkalis, alcohols and weak acids • Labels processed beautifully • Perfectly transparent • A wide selection of colors • A broad range of standard sizes • Caps as you want them—friction-fit or screw type • Protection against tarnishing and shopwear.

Clearsite
... is foresight

Address Dept. C-4

CELLUPLASTIC Corporation

General Offices: 50 Avenue L, Newark 5, N. J.

Milwaukee • Los Angeles • Detroit • New Haven • Cleveland • Denver
Minneapolis • Cincinnati • Atlanta • Dallas • Chicago • Jacksonville •
St. Louis • San Francisco • Phoenix • Seattle • Portland • Richmond
• Montreal • Toronto

NOW . . . reduce costs of special labels with the new "Oliver" 806

Reduce label
inventory costs
Eliminate
label waste
Colorful custom
design

"Oliver" 806 imprints custom designed roll-type labels with variable copy for diverse groups of products. And then cuts and stacks them . . . ready for hand application!

Here's a simple solution to the problem of special labels for various needs. The 806 quickly provides loose diecut labels of almost any type, cut and stacked for hand application. It imprints essential data on a "blank" label from a roll. Turns out 140 labels a minute stacked in a magazine with a capacity up to 1200 labels. Electrical counter stops unit after a predetermined number labels

is cut. Safety cut-off prevents overstacking. Using the same custom label for all groups of products minimizes inventory costs, eliminates waste, pays for itself in short time.



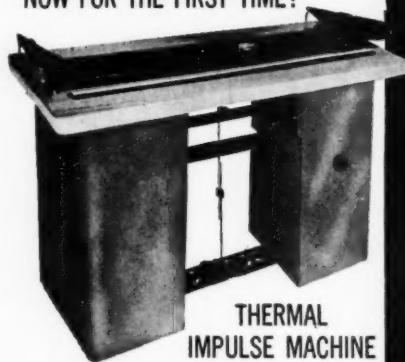
A "blank" roll-type label is imprinted with title, price, weight, code. Imprint items can be changed in a few seconds.



Write
today for
complete
details

OLIVER MACHINERY CO. Packaging Div. GRAND RAPIDS 2, MICH.

NOW FOR THE FIRST TIME!



THERMAL
IMPULSE MACHINE

FABRICATES AND SEALS . .

DRUM LINER SEALER

ANY WIDTH UP TO 42" !

Write Today for
Specimen Seals on
Your Own Mate-
rial

- Electronically Controlled Seals
- Cold Heater Bars
- Single Dial Control
- Seals Gusseted Bags to .004
- No Warm-Up Needed



Vertrod Corp.

17 Williams Avenue Brooklyn 7, N. Y.

the inks used on Carnation Evaporated Milk labels are adjusted to achieve uniform color fidelity under modern tubular store lighting.

Carnation's slogan, too, is one of the best known in the world, according to independent surveys. "From Contented Cows," or derivations thereof, are synonymous with Carnation and Carnation Evaporated Milk.

Recognition of the importance of package quality still is an important factor in the company's over-all product quality program. Today the largest "captive" can manufacturer, Carnation has had the advantage of its own facilities for more than 50 years to improve continually container structure and production methods. While package characteristics have been preserved during this time, numerous technological improvements have been applied or originated to provide what may well be the most economical container, consistent with quality, in use.

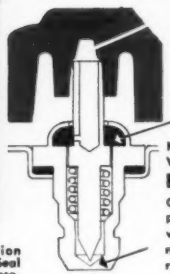
Not listed among the elements that have qualified Carnation Evaporated Milk for *Packaging's Hall of Fame* is an intangible that might be called the fibre of the company. It stems from the character of Founder E. A. Stuart. It was his example of courage, his foresight, his absolute honesty and integrity—and his conviction that his evaporated milk would some day contribute substantially to a need of humanity—that made Carnation a sound organization.

The same spirit and attitude prevails in the company today, guided by his son, Elbridge H. Stuart, now president. And for good reason. E. H. Stuart was the infant son whose dietary crisis was successfully overcome by evaporated milk.

CREDITS: Labels, U. S. Printing & Lithograph Co., Cincinnati, Ohio; Waldorf Paper Products Co., St. Paul, Minn.; Multi-Colortype Co., Cincinnati; Dittler Bros., Atlanta, Ga. Shipping cartons, Northeastern Container Co., Bradford, Pa.; Inland Container Co., Indianapolis, Ind.; Downing Box Co., Milwaukee, Wis.; Kieckhefer Container Co., Camden, N. J.; International Paper Co., New York; Longview Fibre Co., Longview, Wash.; Bireboard Products, Inc., San Francisco; The Mengel Co., Louisville, Ky.; Waldorf Paper Products Co.; Atlas Boxmakers, Inc., Chicago. Canning machinery, Cameron Can Machinery Co., Chicago; E. W. Bliss Co., New York. Labelers, Burt Machine Co., Baltimore, Md.; Standard-Knapp Co., New York. Fillers, F. G. Dickerson Mfg. Co., Chicago.



THE DILL "AEROSOL" VALVE



Enlarged Cross-Section View showing Safety-Seal construction of Dill "Aerosol" Valve.

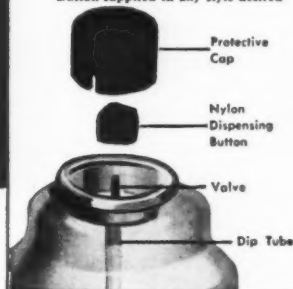
Full Enclosure of Shut-Off Valve Seat
PREVENTS CORROSION

Non-Pierced Valve Opening
ESCAPE PROOF
Gas leakage impossible because valve opening is not pierced until ready to use.

No. 5501 with Non-Pierced Valve Opening

THE DILL "AEROSOL" VALVE ASSEMBLY

Protective Cap and Dispensing Button supplied in any style desired



Now, you can insure permanent shelf-life for your pressurized product. The new "Aerosol" Valve, as skillfully designed by Dill, positively eliminates all possibility of pre-use leakage.

The two vulnerable points in ordinary valves are completely safeguarded by Dill design:

1. The valve shut-off seal is fully enclosed so that contents of the can cannot touch and corrode this seal.
2. The valve has no opening through which gas can escape. Piercing an opening is necessary before can contents can be sprayed.

This amazing new valve, developed for military use, is now available for your product.

It will eliminate for you the serious problems of expensive stock loss and dealer, consumer dissatisfaction. It will give you a highly valuable merchandising feature.

Our engineers invite consultation with you on the design and manufacture of any specific type valve you may require for Aerosol, Wet or Residual, or Aerated Products.

THE DILL MANUFACTURING CO., CLEVELAND 3, OHIO

INSURES THE SHELF STABILITY OF YOUR PRODUCT —

THE VALVES WITH Super Seal SAFETY

DILL

AEROSOL VALVES

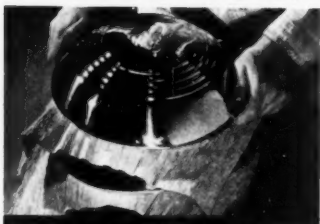
SOF-RAP

(PROTECTIVE CUSHION WRAP)



SO FLEXIBLE ...

... Conforms to any shape



SO CUSHIONY SOFT

... Absorbs transmission of shock, vibration and pressure damage

SO LOW IN COST

... You can use it freely

Industry's newest 100% flexible wrap material gives your products the protection they need from jars and jolts at new low costs! SOF-RAP is a multi-wall crinkled cushion material that provides stretch and permits "slippage" ... safeguarding against abrasion damage from friction and chafing. Soft-resilient inner cushion is strip-laminated to a tough, durable protective outer wrap that resists tears and punctures — perfect for exterior-interior packaging. Cushion sheet is also available without outer sheet

backing for use where only interior protection is required.



send for—

Free Booklet



Folding box awards

(This article continued from page 126)
by The Richardson - Taylor - Globe Corp., Cincinnati, Ohio.

Cosmetics and Personal Accessories. The Gillette Tech Razor carton made by the Robertson Paper Box Co. won *first award* in this group. This carton solved the problem of achieving both high sales value and economy of counter space. Novel construction permits a compact arrangement for 10 individual cartons. The display is made from WPCNB board and the sleeve from BMLN board. Printing is in two colors and varnished. *Second award* went to the Procter & Gamble's Lilt home permanent-wave carton manufactured by Central Carton Co., Cincinnati, Ohio. *Honorable mentions* were the Palmolive after-shave lotion display made by The Lord Baltimore Press; Remington Rand Corp.'s Remington Electric Shaver 60 carton manufactured by Robert Gair Co., Inc.

Soap. *First award* went to the group of three different-sized cartons for All detergent, a product of Detergents, Inc. Manufactured by The U. S. Printing & Lithograph Co., the cartons are four-color printed and gloss varnished, and embody both effective surface design and good construction. They are lined with the Permaline heat-sealing process, which protects against moisture and grease and contributes to siftproofness. The 10-lb.-size carton is made from 0.028 PCNB board; the 1- and 1½-lb. cartons use 0.020 PCNB. *Second award* went to the Nu Bora Soap Co.'s carton made by Container Corp. of America. *Honorable mention* went to the Jonny Mop package made by The New Haven Pulp & Board Co., New Haven, Conn.

Food. The Quaker Maid Co.'s Allorro family of packages for spaghetti, macaroni, etc., took *first prize* in this classification. The problem was to establish appeal and also make drastic changes from the usual blue package. Both were done through the use of the Italian national colors in the red, green and yellow design. The cartons, manufactured by Robert Gair Co., Inc., from Gaircote board, are printed in three colors. The Borden Co.'s Starlac package, made by Container Corp. of America, won *second award*. *Honorable mentions* were (1) the stock meat boxes manufactured by Container Corp. of America, (2) the Atwood Coffee Co.'s coffee carton




manufactured by Waldorf Paper Products Co., St. Paul, Minn., and (3) the family of cartons made by Cornell Paperboard Products Co., Milwaukee, Wis., for the Sir Sirloin frozen-food products.




Bakery. In this category *first award* honors went to the Federal Sweets & Biscuit Co.'s carton for fig bars, made by Robert Gair Co., Inc. These packages have strong display of product, excellent eye appeal, as well as a full-color illustration for supermarket merchandising. The Gaircote board used in making them is printed in four colors. The Shorties brown-and-serve bread carton, made by Lingsfield Bros., Inc., New Orleans, La., took *second award*. *Honorable mentions* went to the Southern Biscuit Co.'s Westover oyster crackers carton made by Sutherland Paper Co., Kalamazoo, Mich., and to the General Baking Co.'s fruit-cake sleeve package made by the Federal Carton Corp., North Bergen, N. J.


Confections. Blum's Valentine sleeve that makes gift use of the standard 8-oz. cartons holding four reverse-tuck assorted Lumps and Almondette candy cartons was the winner of *first award* in this classification. This appealing, eye-catching carton, made from WPC solid butterbox manila and printed in five colors, was manufactured by the Fleishhacker Paper Box Co. for Blum's of San Francisco. *Second award* went to the Champ Gum Ball Bank made by Ace Carton Corp. Winners of *honorable mentions* were Miss Saylor's confection-filled Bunny and Clown carton made by the Fleishhacker Paper Box Co. and the New England Confectionery Co.'s Necco family of candy packages made by Container Corp. of America.

Tobacco. The unusual Christmas gift package for Old Gold cigarettes took *first award* in this group. Made by Robert Gair Co., Inc. for P. Lorillard Co., this carton is made from Foilene board, printed in four colors. No second award was made in the Tobacco classification, but *honorable mention* went to the Lorillard company's Briggs Pipe Mixture display carton made by The Gardner Board & Carton Co.

Hardware. The Wesco group of cartons manufactured by the United Board & Carton Corp., Syracuse, N. Y., for Wesco Waterpaints, Inc., won *first*

You can  running around looking  for a specialty envelope they all say  doesn't exist. Chances are

P. L. Andrews has what you need. Even if we do not, it won't take long  to make it  for you. 

We have a record  of being the leader in the specialty envelope field. One of our cooperative salesmen should be able to help you. P. L. ANDREWS CORP. 1328 Broadway, New York 1, N. Y. The Specialty Envelope House for Over Thirty Years.

P. L. Andrews makes envelopes in the following styles:

cellophane envelopes
compartment envelopes
miniature envelopes
sift proof envelopes
glassine envelopes

metal clasp envelopes
duplex envelopes
record sleeves
Armor-Edge envelopes*
button and string envelopes

*patents pending

LABEL SEAL-IT

Simplifies Bag Sealing and Labeling!



SEALS & LABELS IN ONE EASY OPERATION!

No staples, no pins, no hand work!

Simultaneously! attaches labels and heat seals all suitable bag materials up to 6" wide; also seals to 10" wide. Cuts handling time; saves labor; **pays for itself in 6 months!** Insures tight pack even with oversize bags by folding tops first, if desired. Fast, safe operation with automatic Phantom Feed. Other Heat Seal-It Machines available. Write for circulars.

GLOBE PRODUCTS-HEAT SEAL INC.
3372 Robertson Blvd., Los Angeles 34, California

HEAT SEAL-IT Machines

"If you would know
The POWER
of the LABEL...go
to Ever Ready"

Anonymous

LABELS FOR PACKAGING

ADVERTISING, POINT OF

SPEEDWAY ADDRESSING

MERCHANDISING

SHIPPING, CAUTION

IN ROLLS, SINGLE

DIE-CUT, EMBOSSED

Ask for **FREE IDEA BOOK**
Ever Ready Label Corp.

363 CORTLANDT STREET • BELLEVILLE 9 NEW JERSEY

In a fast-changing world, with its countless new products and by-products, new problems of labeling present themselves. At Ever Ready we have ALL the answers...special papers, special adhesives, special formats. Heat-seal. Red-E-Stik presure sensitive, spot-gummed, strip-gummed, carbonized. Cut single, million orders...over 50,000 customers. Sure, we can put LABEL-POWER to work for you, too!

A
PERFECT
SELLING
TEAM

- A Quality Product
- A Distinctive Cheese Label

By



KRAFT CREAM CHEESE
LABEL BY FOILCRAFT

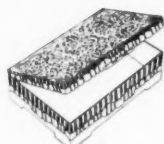
Whether it be a cheese or butter wrap, a box wrap for the holiday season, a novelty gift wrap, a merchandising display for your materials or a new label for your products; whatever the size and shape of your package, whatever the occasion, Foilcraft's brilliant, visible quality will compel the attention of the consumer.

Our complete designing and merchandising departments are at your disposal.
Write for samples and prices.

FOILCRAFT PRINTING CORPORATION

HEADQUARTERS FOR MOLDED BOXES

Over 100 styles to choose from



Large Box, domed lid, hinged, opaque—7 1/2" x 4 3/4" x 1 1/2", also 3/8" high



C.I.G. Wallet or utility box, hinged, clear or all opaque—4 1/2" x 3 1/2" x 1/2"



#25 — 3 1/4" x 2 3/4" x 1/4", hinged, various colors



Hinged Heart Box, clear cover, opaque base—6" x 6" x 1 1/2"

Little boxes, big boxes. Transparent boxes, opaque boxes. Hinged boxes, unhinged boxes. Plain boxes, compartment boxes . . . just as long as they're molded of plastic, and you need a thousand or more, we'll fill your needs.

No Mold Cost to Pay. Our affiliation with 20 leading molders puts us in a position to deliver the boxes you want at prices you'll like.

Write for Illustrated Catalog Sheets. Tell us what you want to package, its size, and approximately how many boxes you will need . . . we will send you photos of appropriate boxes from our stock molds. Immediate service. Write today.

IRA HARMON CO.

Phone: MUrray Hill 7-7644

41 East 42nd Street, New York 17, N. Y.



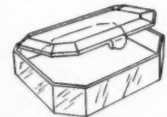
Small Heart, clear cover, opaque base, unhinged—2 1/2" x 2 1/2" x 3/8"



S.P., unhinged, clear cover, opaque base, rectangular or oval—5 1/2" x 3" x 1 1/2"



#30 — 3 1/4" x 2 3/4" x 1/4", hinged



No. 20 — 2 1/4" x 1 3/4" x 1/4", hinged

award in this category. The design was developed to retain color throughout for brand identification and merchandising appeal. The carton is made from WPCN board, printed in three colors. *Second award* went to the Independent Pneumatic Tool Co.'s Thor spare-parts family line of cartons made by Container Corp. of America. *Honorable mentions* were: the Hastings spark-plug cartons manufactured by Crowell Carton Co., Marshall, Mich.; Electric Hose & Rubber Co.'s washing-machine-hose carton made by Container Corp. of America; Tamms Industries' Handy Andy spackling-compound carton manufactured by the Cornell Paperboard Products Co.; Colonial Brush Mfg. Co.'s Pure Bristles paint-brush display cartons manufactured by the Robertson Paper Box Co., Inc.

Textiles. The Harmony House towel-set package made by Container Corp. of America for Sears, Roebuck & Co. took the *first award* in the Textiles class. This carton, made from 0.025 WCCN board printed in three colors, was designed for promotion of multiple-unit sales in a gift carton. *Second award* went to the Swank belt package manufactured by S. Curtis & Son, Inc., Sandy Hook, Conn. Four cartons received *honorable mention*: Sears, Roebuck & Co.'s pillow-carton package, the Westinghouse package for electric sheets and control units, and Sears, Roebuck's Quality sheet carton, all manufactured by Container Corp. of America; and the Sears, Roebuck Harmony House foam-rubber-pillow package manufactured by The Gardner Board & Carton Co.

Retail Boxes. Neither first nor second awards were made in this classification. However, two retail boxes received *honorable mentions*. One was the Schneider embossed fur box manufactured by the Andre Paper Box Co., San Francisco; the other, Style Center's store-identification cartons made by the American Box Board Co.

Carriers. Winner of *first award* for carrier cartons was the Coca-Cola and Seven-Up picnic carrier made by The Gardner Board & Carton Co. These carriers also won the first award for Best Potential New Use. *Second-award* winner was the Country Club beer carton made by Container Corp. of America for the Goetz Brewing Co. *Honorable mentions* went to the Coca-Cola re-use carton manufactured by the Atlanta Paper Co., Atlanta, Ga.; the Genesee Brewing Co.'s

HEAT as you want it!

for Drying
... Sheet Conditioning

use... **HERBERT HEATING EQUIPMENT!**

- PARABOLIC HEATERS
- INFRA RED AND HOT AIR OVENS
- RADIANT PANELS
- GAS INK DRYERS

ONLY the right type of heater will do the right job. We know what to recommend and can furnish the exact type of heater required for your particular purpose.

There's a HERBERT Heater to suit your needs. Consult us regarding your heating problems today!

HERBERT PRODUCTS Inc. 74-30 JAMAICA AVE.
WOODHAVEN 21, N. Y.

HELENA RUBENSTEIN COLGATE PALMOLIVE ELIZABETH ARDEN

PERL MACHINES are known
by the company they keep!

NOPCO CHEMICAL NOVOCOL CHEMICAL HOFFMAN-La ROCHE

MERCK &

More and more of the nation's leading drug and cosmetic producers have turned to PERL bottle, tube and jar filling machines for the speed and accuracy their fine products demand. Whatever your filling requirements, PERL can make the machine that will do the job best

ROGER &

JOHNSON

- A COMPLETE LINE OF MACHINES**
- Bottle Filling • Can Filling
 - For Gravity, Vacuum or Pressure
 - Jar and Tube Filling and Closing
 - Bottle Cleaning
 - Ampoule Filling

Write Today for
Catalog D-3



PERL MACHINE MFG. CO.
68 JAY STREET BROOKLYN 1, N. Y.

APRIL 1952

Simplify...

BARRIER PACKAGING
with the **RIGHT** machines

MAKE government specification packaging easy with these efficient machines for Wrapping... Sheeting and Slitting... Bag Making... Filling... Conveying... Sealing:

- CORLEY-MILLER Wrapping Machines
- CORLEY-MILLER Sheeter-Slitters
- SIMPLEX Automatic Bag Makers
- CORLEY-MILLER and AMSCO Conveyors
- AMSCO Rotary Bag Sealers
- SULLIVAN Jaw-Type Bag Sealers

For example, sheeting and slitting barrier materials for spare parts packaging (including sticky Grade C) is easy and fast with the specially engineered CORLEY-MILLER Model BL Sheeter-Slitter. A few features of the machine:

Slits up to 216 sheets per minute... Simple set-screw slitter adjustment... 2-minute roll change... Choice of manual or continuous action... Sheet delivery to tray or conveyor... Variable speed drive adjustable from 12 to 36 cuts per minute... Optional provision for automatic slip sheeting... Quick crank adjustment for cut-off lengths from 3" to 26"... On and off pilot light signal... Special provision to prevent tacky, wax-coated material from sticking to knife... and many more outstanding advantages.



CORLEY-MILLER Model BL SHEETER-SLITTER

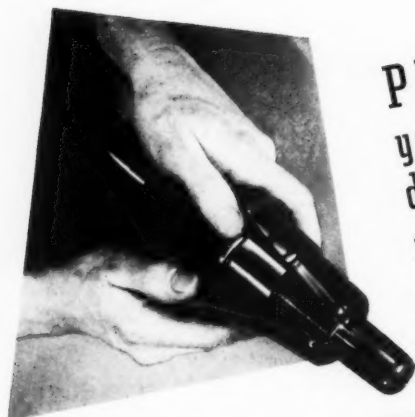
Get complete information on the broad CORLEY-MILLER line of machines for: WRAPPING • SHEETING-SLITTING • BAG MAKING, FILLING, SEALING • HEAT SEALING (HOT PLATES and HAND IRONS) • SANDWICH MAKING

WRITE TODAY FOR ILLUSTRATED FOLDER



Manufacturers of CORLEY and CORLEY-MILLER Packaging Machines
Dept. M, 18 SOUTH CLINTON STREET • CHICAGO 6, ILLINOIS

183



PROTECT
your product
during both
manufacture
and shipment
with...

PROX-PEEL



Prox-Peel—plastic packaging—

protects and preserves through manufacturing
processes—and during shipment.

Prox-Peel applies a loosely adherent film by

spraying, brushing, or dipping. There are

two types—a molten and a solvent type. Both are

used in Specification* requirements of Army,

Navy, and Air Corps. There are hundreds of civilian uses.

Increasingly—Prox-Peel is finding favor to protect

objects and surfaces through the rigors of manufacture

and assembly. Then it is peeled off—is frequently

remelted or dissolved and re-used.

*JAN-C-149, AN-C-117b, AN-C-145, AXS-1756, MIL-P-3038.

For FREE Prox-Peel pamphlet—describing
type, application, apparatus—write to...

**WICHITA
KANSAS**

**PYROXYLIN
PRODUCTS, Inc.**
CHICAGO 32

**PAOLI
PENNA.**

WEST COAST REPRESENTATIVE-RAMSELL PRODUCTS, INC., P.O. BOX 532, PALO ALTO, CALIFORNIA

carrying carton made by the Old Dominion Box Co. for Genessee beer; the Carl Kaster Co.'s Twin Tote milk carton made by The Bradley & Gilbert Co.; Rickey's food-scrap carton made by the Andre Paper Box Co., for use by restaurant patrons to take scraps home to pets.

Beverages. Seagram's Seven Crown whiskey carton manufactured by the Container Corp. of America for J. E. Seagram & Sons, Inc., won *first award* in this category for its eye appeal and display value. This carton, in pint, fifth and quart sizes, is made from 0.022 brush clay-coated news board, printed in five colors and varnished. *Second award* went to the Echo Springs carton made by The Richardson-Taylor-Globe Corp. for Schenley Distillers, Inc. *Honorable mentions* went to the Four Roses whiskey gift cartons manufactured by Milprint, Inc., Milwaukee, Wis., and The Lord Baltimore Press; a round carton for Paul Jones whiskey made by The Lord Baltimore Press; the Old Log Cabin whiskey carton made by American Coating Mills, Div. of Owens-Illinois Glass Co.; the Schieffelin Co.'s Moet champagne gift carton made by Robert Gair Co.

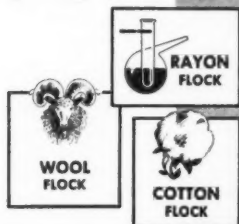
Toys. The Skowhegan duck-pins window carton, made by Container Corp. of America for the North Anson Reel Co., took *first award* in the Toys category. The problem here was to design a package which could be carried through the entire line for rapid identification of brand name and also to give good visual display of the product. The carton is made from 0.028 WPCN board, printed in two colors. *Second award* was received by the J. C. Higgins rifle package made by The Gardner Board & Carton Co. for the High Standard Mfg. Corp. (Sears, Roebuck & Co.). *Honorable mentions* went to the Strombeck Becker Mfg. Co.'s Toddler Train package made by The Dubuque Container Co., Dubuque, Iowa; a stock carton for the All-America sport-ball carrying set manufactured by the Norwalk Paper Box Co., Norwalk, Conn.; the package for MacGregor golf clubs made by The C. W. Zumbiel Co., Norwood, Ohio, for Sport Products, Inc.

Paper Products. *First award* in this group went to the E-Z Hang wallpaper carton manufactured for W. P. Fuller & Co. and Commercial Wallpaper Mill, Inc., by Container Corp. of America. The artistic carton reflects the character of the product packaged and protects the pre-trimmed ends of

CLAREMONT

the Name that's
quality—famous for

FLOCK



America's No. 1 Source of Supply
Modern Manufacturing Facilities
Careful Processing Supervision
Highest Quality Materials
Standard Lengths, 1/32" and 1/16"
Other Lengths to Specifications
Rainbow Range—18 Colors
Sealed, Short-lead Bag Shipments

"An Ounce of
Flock Creates
a Pound of
Alloy"

Write for Samples, Color Cards
Instruction Manual and Prices

CLAREMONT WASTE MANUFACTURING COMPANY
The Country's Largest Manufacturer of FLOCK
CLAREMONT, NEW HAMPSHIRE

MILITARY SPECIFICATION PACKAGING

BAGS & ROLLS

Moisture-Proof • Water-Proof
Vapor-Proof • Grease-Proof

We sell a complete line of cloth backed, paper backed and foil backed barrier materials to meet requirements of Army, Navy and Air Force packaging; also, gummed and pressure sensitive tapes, packing list envelopes and protectors.

AN

MIL-C-6056
UU-P-271a
100-14-A
19-B-13
MIL-B-131A
MIL-C-10547
MIL-E-6060
MIL-B-3149
JAN-P-100

JAN

JAN-P-101
JAN-P-115
JAN-P-128
JAN-P-131
JAN-P-140
JAN-P-658
AN-B-20
AN-C-67b
AN-E-1b
AN-T-12a

MIL

JAN-B-121
JAN-B-148
JAN-P-108
JAN-P-116
JAN-P-117
JAN-P-125
JAN-P-127
JAN-P-130
FS-100-N5

APPROVED CONVERTERS OF SPECIFICATION MATERIALS
Write, Wire or Phone Your Orders



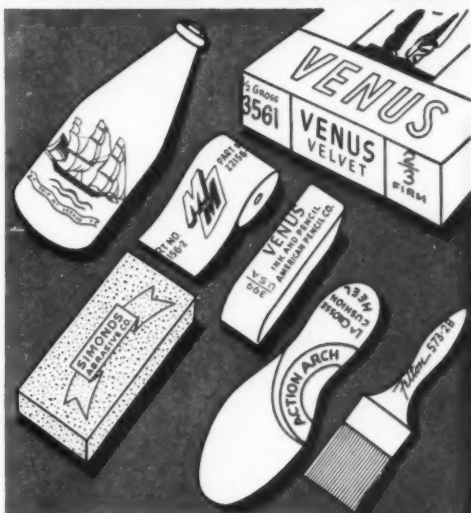
PAPER PRODUCTS
CHARLES E. KING & CO.
SHIPPING MATERIALS

970 WEST CHICAGO AVE., CHICAGO 23, ILL., TELEPHONE MAYmarket 1-6748

MARKEM[®]



marks them all



FROM ARTILLERY SHELLS
TO MEDICAL AMPULES

MASTERS OF MARKING — Since 1911

Markem methods, machines, type and inks have been marking the products of industry for forty years. Markem machines can mark up to many thousands of pieces per hour. They make clear, durable imprints on flat, curved or irregular surfaces of paint, paper, wood, glass, metal, leather, plastic, rubber, fabric, composition and pressure sensitive tapes. No special skill is needed for their operation. Legend and color of imprint may be quickly and easily changed.

MAKE YOUR MARK WITH MARKEM

When your products need marking for Identification, Control or Market — ask Markem. Submit your problem, together with a sample of the item to be marked. Markem Machine Company, Keene 1, New Hampshire.



.....WRAP-ADE'S GONE MILITARY!.....

MODEL A HEAT SEALER FOR

SEALING BARRIER BAGS FOR MILITARY PACKAGING



14" jaw for
sealing large
size bags.

The Wrap-Ade Model A Heat Sealer automatically applies the correct amount of heat at the right pressure for the proper length of time necessary to make a secure and lasting seal to meet all military packaging specifications. Uniform pressure is applied over the entire surface of the jaws, while the heat and time factors are precisely adjusted to give the most efficient seal possible.

- LOW COST
- QUICK DELIVERY
- EFFICIENT OPERATION

Other Machines Available
for all Packaging Materials.



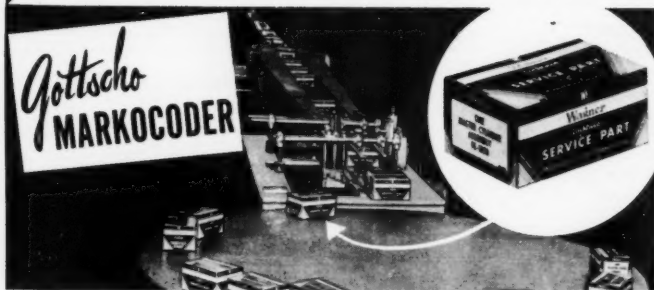
Write today for full information on this and other
WRAP-ADE Packaging Machinery.

MACHINE CO., INC.
83 VALLEY STREET, BELLEVILLE 9, NEW JERSEY
PHONE—BELLEVILLE 2-6150-1

the wallpaper roll. It is made from 0.020 WPCN board, printed in two colors. *Second award* winner was the "Yes" tissues carton made by The New Haven Pulp & Board Co. for the Personal Products Corp. *Honorable mention* went to the Curvax carton made by The Flintkote Co., Los Angeles, for Fernstrom Paper Mills, Inc.

Miscellaneous. The Beacon camera gift box, a package designed for maximum protection of product combined with sales appeal, took *first award*. Manufactured by the National Folding Box Co., Inc., for Whitehouse Products, the carton is made from 0.024 bend chip laminated 45#/480 paper and clay-coated white and is printed in two colors. *Second award* was won by the transparent window carton for Cedacote moth preventive manufactured by the Bruce Carton Co. *Honorable mentions* went to the Rancho grass-seed package made by The Gardner Board & Carton Co. for O.M. Scott & Sons Co.; the Mefco Co.'s Treasurescope package for slides made by the Standard Paper Box Corp.; the Burroughs' office-equipment family of packages made by Robert Gair Co., Inc., which also won honorable mention for Best Artistic Design.

► SAVES MONEY 6 WAYS...



for automatic production-line package imprinting

Write for
► 6-page brochure
describing
MARKOCODER
uses and
advantages

The MARKOCODER is the cost-saving machine that delivers precisely registered, "print-quality" imprints of contents descriptions, code-dates, colors, sizes, flavors, prices, other supplementary information on packages as a synchronized part of your packaging operation. Models for cartons, boxes, cans, canisters, jars, bottles, paper containers, etc.



ADOLPH GOTTSCHO, INC., Hillside 5, N. J.

Magazine-cover —

(This article continued from page 89)
creases of 20%, 30% and more. "When you figure that the average food store handles 300 transactions a day, you can understand what these percentages mean in terms of day-after-day sales volume," says the Kellogg Co. in its trade promotion.

In its advertising, Kellogg is capitalizing to the fullest on the new packaging. The April 14 issue of *Life* is carrying three pages of full-color advertising devoted exclusively to a complete preview of the new cartons. All 10 of the new packages are full-color illustrated with complete descriptions of the new faces which shoppers will be seeing in their grocery stores. The packaging story also will be timed to the announcement in the *Life* ad over Kellogg's battery of radio and television shows, which includes "All-Star Revue," "Space Cadet," "Howdy Doody," "Wild Bill Hickok" and Carl Smith. During March the packaging program was explained to chain and independent store operators at a series of more than 40 trade luncheons throughout the country.



HOW TO ADVERTISE IN THE KITCHEN...

You can't put up billboards in the kitchen.
You can't post bulletins. But you can put a message
on every Hazel-Atlas closure.

Here's real POINT OF USE ADVERTISING. Give the
housewife a new recipe... or sell her the other
products in your line.

Colorful advertising at home... H-A closures
protect and sell.

HAZEL-ATLAS GLASS COMPANY WHEELING, W. VA.

Robertshaw[®] THERMOSTATIC CONTROLS

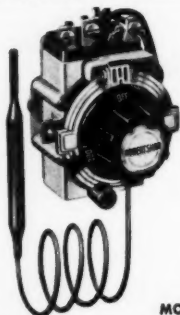
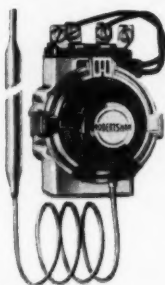
SERVE THE PACKAGING INDUSTRY

IN MANY WAYS



A sturdy, dependable, automatic, rugged, responsive direct-acting, electric thermostatic control for jaw sealers, band or belt sealers, tester equipment, bake ovens, glue pots, etc. (Available also in Reverse-Acting Models.)

MODEL D-1



MODEL H-1



CYCLES AS A THERMOSTAT



AUTOMATICALLY CUTS OUT AT SET LIMIT



STAYS OUT UNTIL MANUALLY RESET

A double pole, single throw temperature controller with an auxiliary single pole, single throw switch that automatically cuts off all current and locks switch in an open position whenever the temperature exceeds temperature range by approximately 7° F. in liquid or 12° F. in air. Available in AC only.



HI-HEAT TO LOW HEAT



FOR BLOWER AND HEATER



FOR AGITATOR AND HEATER

A two-circuit thermostat. When two heating elements are used, high heat element automatically cuts in when thermostat calls for heat. When set temperature is reached, main contacts are automatically broken and low, or holding temperature is cut in to function until drop in temperature again calls for heat.

MODEL F-1



Write for descriptive literature.

In Home and Industry, **EVERYTHING'S UNDER CONTROL**



Robertshaw

THERMOSTAT DIVISION
ROBERTSHAW-FULTON CONTROLS COMPANY
YOUNGWOOD, PENNSYLVANIA

Small packager

(This article continued from page 103) and sealing the packages, according to Mr. Reder.

Demand has increased recently to the point where an automatic wrapping machine is justified. This will cut total packaging costs by 5 cents, or nearly in half, Mr. Reder estimates. It will more than eliminate the hand wrapping and sealing charge, since it will free the girls formerly occupied with this task for other jobs. It is expected that the machine will run off in 20 minutes the 750 cartons which formerly kept two girls busy the entire working day.

The use of an inner container for the portion of sauce—to eliminate its separate freezing and handling—is another efficiency improvement now under consideration.

Careful choice of materials suitable for manual packaging, an efficient routine for the workers to follow and realistic budget control are the three points stressed by Mr. Reder in analyzing the success of his small-scale operation.

CREDITS: Cartons, New Haven Pulp & Board Co., New Haven, Conn. Printed cellophane wrap, Milprint, Inc., Milwaukee, Wis.

More PI proposals

(This article continued from page 137)

(b) Place the test specimen between the two pieces of the cut fresh sample, being careful to place the two surfaces in the same direction as they were before being cut.

(c) To hold the two pieces of the fresh sample in contact with the printed specimen, place a test weight on top of the fresh sample to hold it together under pressure.

(1-B) If the product is in granular or powdered form and is used in that condition:

(a) Place a quantity of the product in an open tray that is large enough to accommodate the test specimen.

(b) Place the test specimen on top of the product so that it is in contact with the product.

(c) Hold the printed specimen in contact with the product by means of a test weight, rubber bands or some other means so as to guarantee contact of the test specimen with the product.

(1-C) If the product is used in

Here's Why

**MORE TUBES ARE FILLED
ON COLTON MACHINES
THAN ON ANY OTHER...**

Brilliant engineering in Colton's new equipment has sent it rocketing to new heights of leadership in the tube-filling field—where Colton has always led.

The new units provide exact accuracy of measure, continuous high speed, quick cleaning, quick adjustment to new sizes and change-over to cans, tubes or jars, complete versatility embracing liquids, semi-liquids, pastes from water-thin to thick and ropey.

Our new condensed catalog of Packaging Equipment presents sixteen cost-cutting items. We suggest you write for it.

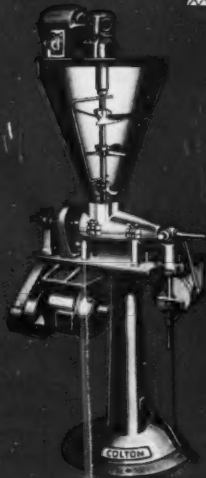
ARTHUR COLTON COMPANY

DIV. SNYDER TOOL & ENGINEERING COMPANY
3438 E. LAFAYETTE • DETROIT 7, MICHIGAN



COLTON AUTOMATIC TUBE FILLER AND CLOSER

World's most widely used tube filling machine. Handles pastes, creams, liquids, powders. Single—55 tubes a minute, sizes up to $1\frac{1}{2}$ " x $7\frac{1}{4}$ "; Twin—85 tubes a minute, sizes up to $1\frac{1}{2}$ " x $7\frac{1}{4}$ ". Automatic work cycle. Produces Colton Clipless Closure. Standard or stainless steel contact parts. Quick change-over. Tube cleaner, cap tightener, stirring device, heated water jacketed hopper, no-tube-no-fill device, all available at extra cost.



COLTON WORM-TYPE TUBE FILLER

Fills tubes, jars, cans, bottles. Max., 50 tubes a minute, sizes up to $1\frac{1}{2}$ " x 8". Especially engineered for pastes. Stirring device and heating jacket extra.

COLTON TUBE FILLER

Standard or
Stainless Steel
No. 120
(Hand Operated)

Fills tubes, jars, cans, bottles. Max., 30 tubes a minute; sizes up to $1\frac{1}{2}$ " x $7\frac{1}{4}$ " by pressure or by gravity feed. Standard or stainless steel contact parts.



COLTON GEAR-TYPE TUBE FILLER

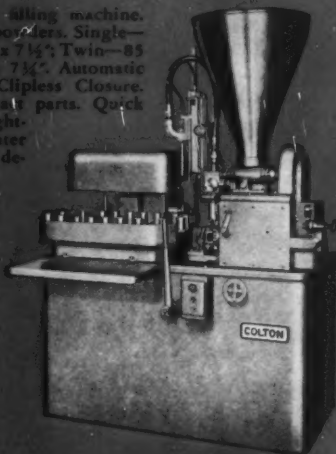
No. 100
(For Pastes
and Creams)

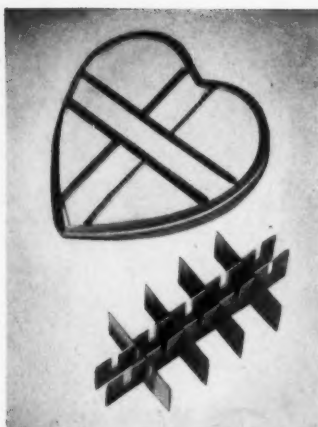
Fills tubes, jars, cans, bottles. Max., 50 tubes a minute; sizes up to $1\frac{1}{2}$ " x 8". Stirring device and heating jacket extra. Very successful with heavy materials.



COLTON POWER TUBE CLOSER AND CRIMPER

No. 400
Produces the double fold only, crimped. Max., 40 tubes a minute; sizes up to $1\frac{1}{2}$ " x 7". Widely used where fully automatic equipment is not required.



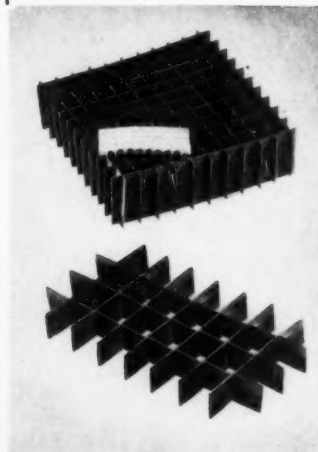


PROTECT WITH PARTITIONS

plain - die cut
made to your specification
fast delivery
pharmaceutical
candy • heart box inserts
collapsible tube • toy
and other trades
fast delivery

Let us serve your packaging problems.

RAPID
CUTTING CO., INC.
169-173 Franklin Avenue
Brooklyn 5, New York
Phone: ULster 5-1400-01-02



liquid, paste, water solution or water mixture form:

(a) Place the test specimens on a flat surface with the printed side up. If a rigid package is being tested, it must be supported so that the printed side is up.

(b) Place 10 cc. of the liquid or paste product or a water solution or water mixture of the strongest concentration of the product which might be in contact with the printing on one of the 4-by-4-in. squares of folded, un-sized, unbleached muslin. The product should cover an area approximately 3 by 3 in.

(c) Place the muslin on which the 10 cc. of the product or product solution has been placed on the specimen for test and place a test weight on it. If necessary, hold the product and weight in place with Scotch tape.

(2) Store the test assembly at 85 to 95% relative humidity and room temperature, or at the highest temperature under which the product would normally be stored, for 10 min. to 24 hrs., depending upon the severity of the test required. If a relative-humidity cabinet is not available, the above humidity can be attained by

placing a beaker of distilled water next to the test assembly and covering the test assembly and the beaker with a bell jar. The bell jar must make a reasonably good seal with the flat testing surface.

(3) At the end of the test period, remove the weight and the product. If necessary, wash with distilled water or some solvent which has been found to have no effect on the finish of the packaging material. Examine the product for discoloration. Where muslin was used, note whether it shows ink transfer or stain. Compare the tested area against an untested sample for change in color, bleed, fade or other changes.

Report

The report shall state the relative humidity and temperature conditions under which the test was carried out. It shall also show the concentration of product used for the test and the length of time which the product was left in contact with the printing. The result shall be expressed as

- (1) No change in product or in ink.
- (2) Slight change (describe).
- (3) Excessive change (describe).

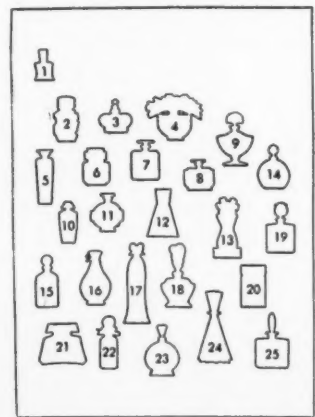
Do package shapes have recognition value?

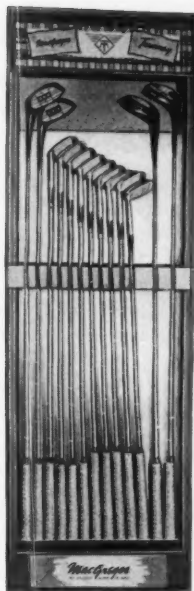
(This article continued from page 107)
more readily as a group, perhaps, to memorable private-mold shapes, the same psychology of design applies in many other fields. The effectiveness of identity by bottle shape is strongly exemplified in beverage and spirits

packaging by the Coca-Cola bottle and the Haig and Haig pinch bottle. Distinctive shape is one more important design feature that can often be built into a package to further brand consciousness not only on the counter and in advertising, but in the home.

CORRECT IDENTIFICATION of perfume packages illustrated on page 106.

- 14 Arpege—Lanvin
- 3 Beloved—Prince Matchabelli
- 10 Bond Street—Yardley
- 7 Chanel No. 5—Chanel
- 16 Chantilly—Houbigant
- 19 Charme Rose—Tussy
- 12 Command Performance—Helena Rubinstein
- 15 Early American Old Spice—Shulton
- 8 Emir—Dana
- 25 Evening in Paris—Bourjois
- 4 Fleurs de Rocaille—Caron
- 11 Gemey—Richard Hudnut
- 17 Indiscrete—Lucien Lelong
- 24 Intoxication—D'Orsay
- 2 Magic Hour—Dorothy Gray
- 5 Meteor—Coty
- 18 My Love—Elizabeth Arden
- 21 New Horizons—Ciro
- 9 Shalimar—Guerlain
- 13 Shocking—Schiaparelli
- 1 To a Wild Rose—Avon
- 23 Tousjours Toi—Corday
- 6 Tweed—Letherie
- 22 White Shoulders—Evyan
- 20 Woodhue—Fahergé





PROTECTION p-l-u-s distinctive merchandising appeal

Whatever the size and shape of your product Frame-Vue Boxes will compel the attention of your customers.

Proven Facts

The most rigid construction of any folding box.

Transports your product in first class condition.

Increases your sales through its eye catching appeal.

Our complete designing and merchandising departments are at your disposal.

Write today!

C.W. ZUMBEL COMPANY *good packaging ideas*



Is PACKAGING your Bottleneck?

■ WE HAVE AUTOMATIC STOKESWRAP PACKAGING MACHINES HANDLING ALL KINDS OF HEAT SEALING MATERIALS FOR PACKAGING POWDERS, SOLIDS, CREAMS AND LIQUIDS IN SMALL PACKAGES UP TO ONE OUNCE.

■ OUR AUTOMATIC EQUIPMENT IS ESPECIALLY ADAPTED TO SAMPLING PROGRAMS.

■ WE ALSO HAVE SEMI-AUTOMATIC EQUIPMENT FOR PACKAGING IN LARGER SIZES OR CONTAINERS.

■ WE WILL RETURN YOUR MATERIAL TO YOU FULLY PACKED OR DROP SHIP IF DESIRED.

WRITE US REGARDING YOUR PROBLEMS.

PACKAGING SERVICE CORPORATION
7602 South Greenwood Ave., Chicago 19, Ill.

Better Aniline Printing by incorporating shellac in your aniline inks

By formulating aniline printing inks with Mantrose Quality shellac you can obtain the following characteristics:

Better adhesion

Improves the retention of pigment by film, foil and paper.

Increases scuff and scratch resistance.

Better gloss

Adds a pleasing soft lustre to printed areas.

Better coverage

Insures uniform appearance of large flat areas.

Better finish

Provides a hard, non-tacky, non-smearing surface when dry.

#65 refined extra white bleached shellac.
For clear or transparent inks. Contains no wax.

Bone dry bleached white shellac.
For best printing of heavy, even, opaque solids.

Mantrose maintains a complete laboratory to develop a shellac that meets your requirements.

SEND FOR SAMPLES. A sample of the above grades will be sent upon inquiry on your business letterhead.

The MANTROSE CORPORATION

Importers • Bleachers • Manufacturers
146 Forty-first Street
Brooklyn 32, N. Y.

Quality
SHELLAC

Another Packaging Problem Solved by METAL EDGE



NATIONAL METAL EDGE BOX CO.

PACKAGING • MATERIALS HANDLING • INVENTORY CONTROL

334 North 12th Street, Philadelphia 7, Penna.

A CASE HISTORY:

PROBLEM:

How could a manufacturer who packed his tire chains in drab fabric bags get better display value for his product?

SOLUTION:

Durable, attractive Metal Edge boxes replaced the bags.

RESULT:

"The sturdiness of the Metal Edge box assures us they'll reach the retailer in good condition... they have greater merchandising value than any other tire chain package."*

*letter from secretary

METAL EDGE—the engineered method—has solved diverse packaging problems in more than 100 American industries.



"RED" sez:

There is no better closure method than gummed tape. There is no better gummed tape than REDCORE.



Rexford
PAPER COMPANY
MILWAUKEE 3, WIS.

Inexpensive...

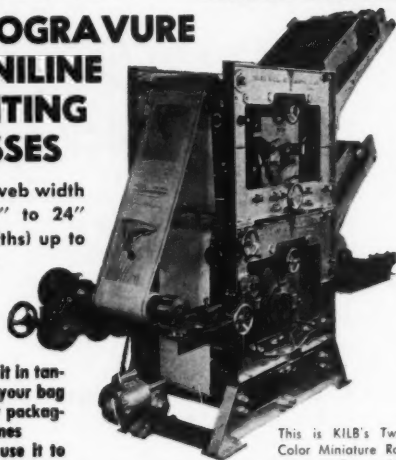
MINIATURE

ROTOGRAVURE & ANILINE PRINTING PRESSES

... 10" web width
(also 15" to 24"
web widths) up to
3 colors.

... Use it in tan-
dem with your bag
making or packag-
ing machines

... or use it to
preprint your pack-
aging webs.



This is KILB's Two Color Miniature Roto-gravure Press, with two Single Color Units, mounted one above the other.

We can combine Aniline & Gravure Printers in one Frame,
if you desire.

FRANCIS C. KILB CO.

Write for literature and prices.

140 E. Second St.

Garden City 7-7191

Mineola, L. I., N. Y.

Portion control

(This article continued from page 91)
feed into flat tray-type master containers, each tray holding 20 of the individual servings. Thus, the 10-track belt feeds two lines at a time for packing the master containers, 10 of which are packed to a shipping carton designed to hold 200 of the individual containers. The chipboard master cartons are a platform-type tray, with the top surface containing 20 die-cut apertures into which are nested the bodies of the vinyl unit containers.

Kraft officials point out that the field for using portion-control packaging of foods appears to be so broad that no forecast can be made at this time in regard to all the types and quantities of foods that may be introduced in the new package form. It is said there is virtually no limit in regard to sizes and shapes that can be handled in completely automatic operation.

So far, the development of "Yours Alone" packages has been aimed entirely at the institutional trade—fairly large quantities having been supplied to restaurants and users such as the Pennsylvania Railroad. Indications are that patron reception has been enthusiastic.

Kraft believes that portion-control packages, however, are not limited to the institutional field. There are many reasons—including novelty, convenience, economy of use and sanitary service—why the new packaging techniques may be successfully adapted to consumer merchandising. By no means least among the several potential selling advantages will be the attractive, neat appearance of the container, its visibility feature and the fact that especially in the larger sizes it offers the possibility of re-use.

CREDITS: Vinylite plastic, Bakelite Div. of Union Carbide & Carbon Corp., New York. Compartmented master cartons, Modern Boxes, Inc., Chicago. Shipping containers, Container Corp. of America, Chicago.

Toxic wrappers

The Food and Drug Administration seized 6,000 lbs. of processed cheese recently because transparent wrappers used in packaging the product were treated with dehydroacetic acid to prevent mold growth. Government chemists reported that the chemical, with toxicity similar to carbolic acid, had penetrated the cheese.

PARTITIONS FOR PROTECTIVE PACKAGING

**MADE TO YOUR
EXACT
SPECIFICATIONS**

WRITE, PHONE or WIRE
for QUOTATIONS on
YOUR REQUIREMENTS

PETER PARTITION CORP.

Manufacturers of Cardboard Partitions

19-21 HEYWARD ST. Telephone: 5-4033 BROOKLYN 11, N. Y.

**CUSTOM PACKAGING
and HAND ASSEMBLY**

**for Civilian Industry
and Military Services**



Our packaging equipment is custom made and designed to fit your job. We can enclose in heat sealed envelopes . . . POWDER, PASTE and DEVICES OF IRREGULAR SHAPES. We can work with . . . FOIL, GLASSINE, CELLOPHANE, KRAFT and COATED PAPERS OF ALL KINDS.

Write for our brochure, giving more complete information regarding our low-cost packaging.

PERFECTION PACKAGING

16-19 Mill Street, Shelburn, Indiana



Have You
Investigated

BUNDLING?

Dealers like it
for

**GREAT HANDLING
CONVENIENCE**

You will like it
for

**LOWER PACKAGING
COSTS**

*Scandia will give you
the facts and the
pleasant figures.
Just ask.*

Scandia
MANUFACTURING COMPANY

North Arlington, New Jersey

**QUALITY...
ROTOGRAVURE
CYLINDERS
ON TIME!**

**PROOFS
IN COLOR**

COMPLETE service in
preparing cylinders of any
size — for all purposes.

ACCURATE microscopic
control of engraving depths

CYLINDERS, Inc.

Grenloch, New Jersey
Blackwood 8-0570

RULA ADHESIVES FOR LAMINATING

*water dispersion and solvent
formulations for laminating*

acetate	polyethylene
cellophane	sulphite paper
pliofilm	glassine
saran	Kraft
foil	scrim

Special adhesives developed
to meet your laminating needs

Batch to batch uniformity assured
by rigid laboratory control

Write for further details

RUBBER LATEX CO. of AMERICA
CLIFTON, NEW JERSEY

Plants and people

(This article continued from page 156)
company specializes in the production of labels and wraps for the food industry.

John W. Waldron has been appointed to the newly created position of engineering sales manager of **Pyro Plastics Corp.**, Union, N. J. The new position was created as a result of Pyro's recent expansion in the field of custom injection molding.

A. M. Steigerwald Co., Chicago, designers and producers of labels, have announced the purchase of **Labels, Inc.**, Minneapolis.

Charles E. Brookes has been appointed to the sales staff of the Organic Chemicals Division, **Dewey & Almy Chemical Co.**, Cambridge, Mass. The appointment is part of the company's expanded program for the production and sales of high styrene copolymer latices and resins, polyvinyl acetate emulsions, plasticizers and dispersing agents.

Pollock Paper Corp. has announced the appointment of **W. A. Rike** to its execu-

tive staff for waxed-paper operations. Mr. Rike, who will make his headquarters at the company's Middletown, Ohio, plant, is known for the designing and printing of food packaging materials, particularly for the baking industry.

John H. Feldkamp has been named as a sales representative for **Geo. H. Morrill Co.**, division of **Sun Chemical Corp.** Mr. Feldkamp will cover Ohio and Indiana as printing-ink sales representative.

The Culligan Zeolite Co. has announced that new equipment and additions to its San Bernardino, Calif., plant have doubled its silica gel production.

The American Agile Corp., Cleveland, Ohio, fabricators of polyethylene and hard polyvinyl chloride products, announce the completion of a new 12,500 sq. ft. building at 5461 Dunham Rd., Maple Heights, Ohio (P. O. Box 168, Bedford, Ohio). The expanded production facilities permit the manufacture of a complete range of standard and custom-built bottles, containers, as well as other equipment and apparatus.

The Gummed Products Co., Troy, Ohio, has named **Wylie & Davis** as West Coast representatives of the company. They will cover California, Montana, Idaho, Wyoming, Arizona, Nevada, Utah, Oregon and Washington, selling the Gummed Prod-

ucts line of sealing tape and specialty papers. **E. A. Dillon**, long-time Western sales representative for Gummed Products, will continue with the company in the West as a consultant. **Wylie & Davis** maintain offices at 320 Market St., San Francisco, and 1151 S. Broadway, Los Angeles.

Al LaTour, formerly with the Industrial Tape Corp., has joined **Transparent Products Co., Inc.**, New York, converters and distributors of pressure-sensitive materials, as sales representative.

Henry Sturgis Dennison, 74, president of the **Dennison Mfg. Co.**, Framingham, Mass., died on Feb. 29th. Mr. Dennison joined the company immediately on his graduation from Harvard, working in all divisions of the firm to prepare himself for executive assignments. He had an active and successful career as a manufacturer and in public life.

Dr. Fred Finley Fitzgerald, director of research for **American Can Co.** from 1935 until his retirement in 1942, died on Feb. 7 at Joliet, Ill. Dr. Fitzgerald, who was 69 years of age, joined American Can in 1920. Among the major projects he directed were the development of sterilizing process determination methods for canned foods and vacuum packing of foods.

EVEN AN *Egg*-



COULD BE PACKAGED ON THIS WRAPPER

WITHOUT BREAKAGE!

Modern, versatile machine wraps products of every type and description at amazing speeds up to 120 units per minute!

Write for fully illustrated descriptive booklet



FOR DEFENSE

We are doing our part by providing a large portion of our production facilities for government defense work.

We don't suppose eggs will be individually wrapped in Cellophane. But, it does help point out how *carefully* and yet, how *speedily* the Campbell Wrapper is packaging products of the most fragile and delicate nature. This modern machine could very easily be the solution to your most difficult packaging problem. Write now, and learn fully how a Campbell Wrapper can be furnished to meet your individual requirements — and greatly increase your wrapping production with decided savings in time, labor and materials.



HUDSON-SHARP MACHINE CO. • GREEN BAY, WIS.








WRAPS PRODUCTS OF ALL TYPES AND SHAPES

New York office:
55 West 42nd St.

CLASSIFIED ADVERTISEMENTS

Modern Packaging reserves the right to accept, reject or censor classified copy.

EMPLOYMENT • BUSINESS OPPORTUNITIES • EQUIPMENT (used or resale only)

MACHINERY FOR SALE

REBUILD LIKE NEW IMMEDIATE DELIVERY
International S. S. Straightline 160 min.
Vacuum Filler, Resina LC Automatic Capper.
(RUC) New Way MB Wraparound Labeler.
Robinson #4, 800 lb. S. S. Dry Powder
Mixer. Stokes and Smith Model B Transwrap
Filler. Capon EAF 4 head Rotary Capper.
Island Equipment Bottle Unscrambler. Stokes
90D S. S. Auto. Tube Filler and Closer, also
for Jars. Stokes & Smith C1, C2, C6 and
HGBB Auger Powder Filler. Triangle Elec-
Tri-Pak G2C, A6CA Fillers. Filler 4 Head
S. S. Filler. Knapp 429 and Ceco Carton
Closers. Pony ML and M Labelers. Pneum-
atic Scale Auto. Cartoning Lines, 60 and
30 per min. Ceco, Redington and R. A. Jones
Automatic Cartoning Units. Package Machin-
ery Co. CA2, DF1 and FA40 Wrappers.
Hayssen 3-7, Miller, Scandia Model SNU1
Wrappers. This is Only a Partial List. Tell
Us Your Requirements.

Union Standard Equipment Company
318-322 Lafayette Street
New York 12, N. Y.

FOR SALE: U. S. Automatic Box Co. 4 in.
rotary feed box mach. Serial No. 657280.
1½ h.p. motor, 45 to 100 units per min.
15½x9½x2½ max. carton. Practically new,
excellent condition. Product change requires
liquidation. Reasonable. Box 323, Modern
Packaging.

WRAPPING MACHINES: You can buy at a
very attractive price 2 practically new W-6
Campbell Wrapping machines manufactured by
Hudson Sharp Machine Company complete with
photo electric registry equipment input and
output conveyors for packages up to 3" wide by
2" high and 18" long. Will & Baumer Candle
Co., Inc., Syracuse 1, New York

FOR SALE: FA machine. Pkg. Mach. Co.
Serial No. 17052. ¾ h.p. motor, 40 to 100
units per min. 12x5½x3½ max. carton.
Practically new, excellent cond. Product
change requires liquidation. Reasonable. Box
324, Modern Packaging.

FOR SALE: 1-Type A and 1-Type B Transwrap
Machines; 2-Brightwood Box Machines, with
collapsers; Sid. Knapp Self-Adjusting Glue
Sealer & Comp. Unit; Pneumatic Seal Packag-
ing Line, late type; Pneumatic Seals 4-head
Capper; Capon Sift Capper; 7-Vacuum & Gravity
Fillers; S/S fitted; Stokes & Colton Auto. Tube
Fillers & Closers. Only a partial list. Send us
your inquiries. Consolidated Products Co., Inc.,
16-20 Park Row, N. Y. 38. BAReley 7-0600.

NEW LAMINATING MACHINE: Unused
Haida Model V. 45" rollers, complete with
gumming unit, drying tunnel, heating unit
and 15 H.P. V-S drive. Suitable for either
cellophane, paper or foil laminations. Com-
plete machine available for immediate ship-
ment. Non-erecton and sale of this machine is
due to our policy of not engaging in the
laminating field. For full information and
details, contact Aluminum Foils, Inc., P.O.
Box 540, Jackson, Tennessee.

DELTA-SEAL PACKING UNIT: For 5 and 10 lbs.
bags, complete with setting and compression
conveyors, motors 22/44-60 Cyc-3 phase, unit
used very little, excellent mechanical condition,
priced \$5,000.00 f.o.b., Los Angeles. Write
California Milling Corporation, Box 3488, Ter-
minal Annex, Los Angeles 54, California.

HELP WANTED

SALES ENGINEER OR TECHNICAL ENGINEER:
Recognized manufacturer of industrial packag-
ing materials has opening for qualified sales
engineer or technical salesman with executive
ability. Replies will be held confidential. Box
326, Modern Packaging

BRANCH MANAGER

For subsidiary of manufacturing corporation
engaged in nation-wide business; million
dollar branch; long-established and growing;
Eastern seaboard; printing and fabricating
paper products. Must have experience in sim-
ilar industries such as: wrappers (printed,
axed) for bread, cakes, candy; folding
boxes and cartons; designing, printing, wax-
ing, converting of paper goods for display
packaging. Sales competence essential besides
ability to manage business, plant and person-
nel. Applicant's background subject to search-
ing investigation. Remuneration commensu-
rate with undertaking and consistent with
current economic conditions. Our organiza-
tion is aware of this advertisement. Write
full particulars to Box 331, Modern Packag-
ing.

CHEMISTS: Packaging field experience pre-
ferred. Large well-known concern located New
York City has opening for B.S. graduate with
minimum of one (1) year's experience in
laboratory work. Salary commensurate with
experience and qualifications. 5 day week.
Submit detailed resume of experience, educa-
tion, age, present salary, etc. Box 330, Modern
Packaging.

PAPER BOX SALESMAN: Experienced for Fold-
ing, Set-Up Boxes, and Lithography for Metro-
politan New York. This opportunity is with a
well known plant specializing in better grades
of boxes. Applications will be kept in absolute
confidence. Box 308, Modern Packaging.

QUALITY CONTROL TECHNICIAN WANTED:
Rapidly expanding, large southern corrugated
box plant has opening for quality control tech-
nician to act as assistant in charge of depart-
ment. Must be fully acquainted with production
and quality control. Splendid opportunity for
qualified applicant. Replies kept strictly con-
fidential. Box 327, Modern Packaging.

PACKAGE ENGINEER WANTED: With design
experience, needed for work in rapidly expand-
ing Southern corrugated box plant. Great op-
portunity for aggressive man with experience
and creative ability. Replies treated in strictest
confidence. Box 328, Modern Packaging.

SALESMEN: If you can sell Cellophane
Products, and are looking toward the future,
we have several exceptional territories open
because of expanded output. Write us all
about yourself, experience and background.
All replies will be held in strictest confi-
dence. Our employees know of this ad.
The Munson Bag Company, Zone 7, Cleve-
land, O.

SITUATIONS WANTED

MECHANICAL ENGINEER: Single. A.C. 22 years
experience in all phases of the packaging and
converting industry. Desires position with a first
class company as plant engineer, chief Design
engineer, or production engineer. Free to travel,
available May 15. Box 329, Modern Packaging.

SALESMAN: Folding Cartons and Counter Dis-
player, with 10 years' experience in sales, pro-
motion and production work. I possess an un-
usual creative flair for merchandising and sales
promotion and am presently applying an entirely
new sales approach which has proven highly
applicable in virtually every phase of industry.
Am now employed, but desire new position with
a top-noted nationally known firm with its own
board mill. The firm I seek must have a highly
creative sample and art department, with an
experimental division. I am 35 years of age,
personable, possess an excellent command of
English, am ambitious and aggressive. Avail-
ability: 2 weeks. Territory desired: N.Y.C. but
will consider limited travel. Salary or draw
basis, plus expenses. Box 325, Modern Packag-
ing.

MISCELLANEOUS

WANTED: One Transwrap, Model B, auger feed.
Box 321, Modern Packaging.

WANTED: Plastic scrap and rejects in any form.
Cellulose Acetate, Butyrate, Polystyrene, Vinyl
Polyethylene, etc. We pay top prices for clear,
colored and printed scrap in any quantity. Box
319, Modern Packaging.

WANTED: Cameron Slitter, Packaging Line,
Labeler, Capper, and Mixer. Box 320, Modern
Packaging.

SCARCE FOIL FOR SALE: Discontinued
items in our line make it necessary to dis-
pose of our entire stock of .003 and .004
gold-colored aluminum foil manufactured by
Reynolds and Kaloer minimum. It is 26
inches wide in rolls and is backed with 602
paper stock. Suitable for labels, packaging,
window or interior display, etc. Samples and
details on request. Graham W. Dible, "the
Orchid King," Dible Bldg., 8th and Wall,
Los Angeles 14.

WANTED: Bagprint #10, Roto-Simplex #2, or
equivalent paper bag machine with drum de-
livery for bags up to 10½x16". Please state
price and condition. Box 322, Modern Packag-
ing.

FOR SALE: Cellophane Bags, new, 30 gauge
DuPont #14 red, 4½" x 4" x 14½", ideal for
attractive display package. Save 50%. Purchas-
ing Department, Cutter Laboratories, Berkeley,
Calif.

WANTED: PLASTIC SCRAP—Cellulose Acetate
and rigid vinyl sheet scrap in any quantity. Also
Polystyrene, Acetate, Butyrate molded rejects,
scrap and excess molding powder inventories.
Box 316, Modern Packaging.

EFFECTIVE WITH THIS ISSUE OUR RATES WILL BE AS FOLLOWS:

All classified advertisements payable in advance of publication

Up to 60 words.....\$10.00

Up to 120 words.....\$20.00

Up to 180 words.....\$30.00

Up to 60 words (boxed).....\$20.00

Up to 120 words (boxed).....\$40.00

Up to 180 words (boxed).....\$60.00

For further information address Classified Advertising department, Modern Packaging, 575 Madison Ave., N. Y. 22, N. Y.

Soon...an exceptional opportunity to sell the booming West Coast packaging market



Special Western States Section
July issue of MODERN PACKAGING

Here's why it adds up to an advertising "natural"!

... The unmatched advertising impact of the leading national packaging magazine.

... In a special "Western States" section dealing exclusively with Western packaging conditions.

... timed for distribution to Western packers before they assemble at the Fourth Western Packaging Show in Los Angeles.

... with an additional circulation of 3,000 copies of the special section go-

ing to hand-picked lists of Western packaging men to insure blanket coverage of the market.

... plus MODERN PACKAGING'S full nation-wide circulation of more than 19,000 copies.

... and all this at regular advertising rates!

Or... if you are interested in reaching MODERN PACKAGING'S Western audience only... select the special "split" distribution plan that lops off unwanted, national circulation and delivers your ad—with all the prestige of MODERN PACKAGING behind

it—solely to readers in the eleven Western states.

Under the terms of this special option, advertising rates are drastically lower (less than those of a regional magazine!) yet give you a guaranteed minimum of 6,000 Western readers!

Write for details. The Western States section will appear with the regular July issue of MODERN PACKAGING. Last forms close June 10th. For more details, space reservations and rate card, write MODERN PACKAGING, 575 Madison Avenue, New York 22, N. Y.

Modern packaging

A BRESKIN PUBLICATION

575 MADISON AVENUE, NEW YORK 22, NEW YORK

INDEX OF ADVERTISERS

Ace Carton Corporation	30	Goodrich, B. F., Chemical Com- pany, The Geon Division	7	Paper Machinery & Research, Inc.	143
Aeme Backing Corp.	15	Goodyear Tire & Rubber Com- pany, The Chemical Division ..	21	Perfection Packaging	193
Aluminum Company of America ..	28	Goodyear Tire & Rubber Com- pany, The Pliofilm Dept.	110, 111	Pert Machine Mfg. Co.	183
American Bag & Paper Corp.	29	Gottsch, Adolph, Inc.	186	Peter Partition Corp.	193
American Can Co.	51	Harmon, Ira, Co.	182	Peters Machinery Co.	144
American Viscose Corporation, Sylvania Division	43	Hazel-Atlas Glass Company	187	Plax Corporation	35
Anderson Bros. Mfg. Co.	162	Herbert Products Inc.	183	Pneumatic Scale Corp., Ltd.	41
Andrews, P. L., Corp.	181	Hinde & Dauch	149	Popper & Sons, Inc.	199
Angier Corporation	176	Howard Plastics	174	Potdevin Machine Co.	50
Armstrong Cork Co., Glass & Clo- sure Division	159	Hudson-Sharp Machine Co.	195	Pyroxylin Products, Inc.	184
Avery Adhesive Label Corporation	38	Industrial Packaging Co., Inc.	9	Rapid Cutting Co., Inc.	190
Bakelite Company, A Division of Union Carbide and Carbon Corporation	33	Inta-Roto Machine Co., Inc.	145	Rayon Processing Co. of R. I., Inc.	145
Bartelt Engineering Company ..	146	International Printing Ink, Divi- sion of Interchemical Corp.	45	Redington, F. B., Co.	3
Beck, Charles, Machine Corp.	161	Island Equipment Corp.	146	Resina Automatic Machinery Co., Inc.	152
Bemis Bro. Bag Company	58	Johnston Foil Manufacturing Co.	36	Rexford Paper Company	192
Bensing Bros. and Deeney Sales Company	59	Kilb, Francis C., Co.	192	Reynolds Metals Company	12, 13
Black-Clawson Co., The Dilts Ma- chine Works Division	200	Kimble Glass Division, Owens- Illinois Glass Company	142	Riegel Paper Corporation	54
Bradley Industries	162	King, Charles E., & Co.	185	Robertshaw-Fulton Controls Co.	188
Braun, W., Co.	162	Lerner Plastics, Inc.	39	Roto Bag Machine Corp.	153
British Cellophane Limited	56	Low Paper Company	42	Rotogravure Packaging Inc.	31
Brown Company	74	Machinery Mfg. Co., Inc.	172	Rowell, E. N., Co., Inc.	37
Burlington Mills	40	Manhasset Machine Co.	174	Rubber Latex Co. of America ..	194
Burt, F. N., Company Inc.	127	Mantrose Corporation, The	191	Scandia Manufacturing Company	194
Cameo Die & Label Company ..	163	Manufacturers' Literature ..	165, 166	Schaefer Machine Co.	150
Celanese Corporation of America, Transparent Films Dept.	65	Marathon Corporation	10	Sheffield Tube Corporation, The	167
Celloplastic Corporation	177	Markem Machine Company	185	Shellmar Products Corporation	
Champion Paper & Fibre Co., The	61-64	Mehl Manufacturing Co.	154, 155	Back Cover	
Champlain Company, Inc.	20	Miller Wrapping & Sealing Ma- chine Co.	183	tion	Inside Back Cover
Chicago Printed String Co.	170	Mills, Elmer E., Corporation	17	Standard Printing Company	16
Claremont Waste Mfg. Company ..	185	Milprint Inc.	55	Steigerwald, A.M., Company	66
Cleveland Container Co., The ..	171	Minnesota Mining & Mfg. Co.	14	Stein Hall & Co., Inc.	69
Colton, Arthur, Company	189	Modern Engraving & Machine Co.	18	Sun Chemical Corp., General	
Container Corporation of America	79	Moore & Munger	8	Printing Ink Company Division	173
Counsel Machine Company, Inc.	174	Mosstype Corporation	156	Swift & Company	27
Crown Cork & Seal Company	44	Nashua Corporation	80	Switzer Bros., Inc.	147
Crystal Tube Corporation	199	National Can Corporation	32	Sylvania Division, American Vis- cose Corporation	43
Cylinders, Inc.	194	National Metal Edge Box Co.	192	Technopol Laboratories Limited.	68
Dale, John, Limited	6	National Starch Products Inc., Inside Front Cover		Thilmann Paper Co.	160
Dill Manufacturing Co., The	179	New Jersey Machine Corporation	72	Transparent Wrap Machine Corp.	34
Dilts Machine Works, Division of The Black-Clawson Company ..	200	Nichols Paper Products Company	180	Tri-State Plastic Molding Co., Inc.	11
Dobeckmun Company, The	5	Olive Can Company	75	Troth, Bright, Page, Inc.	146
Dow Chemical Co., The, Plastics Dept.	157	Oliver Machinery Co.	178	Tupper Corporation	76
du Pont de Nemours, E. I. & Co. (Inc.), Cellophane	19	Oncida Paper Products Inc.	22, 23	Union Bag & Paper Corp.	47
du Pont de Nemours, E. I. & Co. (Inc.), Cel-O-Seal	139	Orkin Institute of Industrial Sani- tation	24	Union Carbide and Carbon Cor- poration, Bakelite Division ..	33
du Pont de Nemours, E. I. & Co. (Inc.), Polychemicals	169	Owens-Illinois Glass Company ..	151	U. S. Automatic Box Machinery Co., Inc.	175
Eastman Kodak Company, Cellu- lose Products Division	141	Owens-Illinois Glass Co., Kimble Glass Division	142	U. S. Printing & Lithograph Co., The	70, 71
Ever Ready Label Corp.	181	Oxford Paper Company	25, 26	Vanant Products	78
Fairest, Morgan, Ltd.	67	Package Machinery Company ..	128	Venesta Limited	60
Filtrol Corporation	49	Packaging Service Corporation ..	191	Vertrod Corp.	178
Fisher's Foils Ltd.	73			Wirz, A. H., Inc.	46
Foilcraft Printing Corporation ..	182			Wrap-Ade Machine Co., Inc.	186
Fry, George H., Company	156			Wright Machinery Company	57
Gair, Robert, Co., Inc.	1			Zumbiel, C. W., Company	191
Gardner Board & Carton Co., The	52, 53				
Gaylord Container Corporation ..	77				
General Printing Ink Company, Division of Sun Chemical Corp.	173				
Gilbert Plastics, Inc.	145				
Globe Products-Heat Seal Inc.	181				

Modern
packaging

Published by Modern Packaging Corp.
575 Madison Avenue, New York 22, N.Y.

A BRESKIN
Publication

Pointed

to

PERFECTION!

PerfeKtum
American-made SYRINGES

Every detail in the construction of PerfeKtum all-glass Luer Syringes is pointed to give you and the doctor perfect PerfeKtum . . . fine . . . flawless all-glass Syringes.

EACH AND EVERY SYRINGE IS INDIVIDUALLY GROUND. PerfeKtum SYRINGES MEET ALL FEDERAL SPECIFICATIONS AND ARE DESIGNED AND MADE TO MEET EVERY MEDICAL REQUIREMENT.



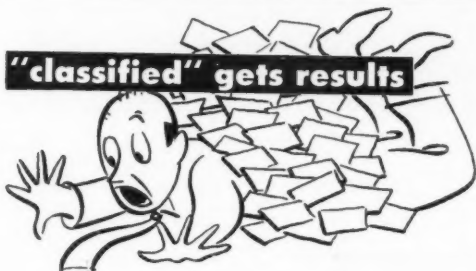
for information write DEPT. MP-

EST. 1922

POPPER & SONS, INC.

300 FOURTH AVE., NEW YORK 10, N. Y., U.S.A.

Cable address TANTALUM



With D.O.'s bringing about re-organizations everywhere, there is probably a better market for your used equipment at the present moment than at any time during the past two years.

Check the inexpensive rates on "classified" on page 196 of this issue. It will pay you to convert your used equipment into cash now. Write . . .

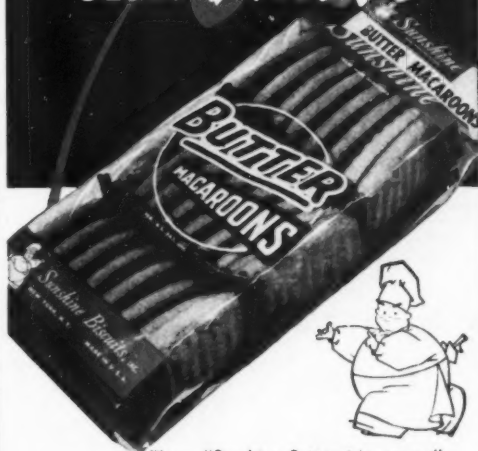
Classified Advertising Department

MODERN PACKAGING

575 Madison Avenue

New York 22, N.Y.

WRAPPED *Fresh-*
STAYS *Fresh-*
SELLS *Fresh!*



These "Sunshine Butter Macaroons" attractively displayed in Crystal Tube packages have that "fresh-from-the-oven" appeal . . . and the transparent cellophane bag helps keep them that way! These glistening cookie packages are typical of the way Crystal Tube shows your product to its best advantage — to make customers buy-conscious of your trademark. This dual emphasis sparks up sales . . . and profits! There's no obligation for ideas or suggestions when you call for Crystal Tube's friendly, reliable service. Why not write us today.



Inquiries on Military Packaging are invited making things *Crystal* clear!

CRYSTAL TUBE CORPORATION

6625 W. DIVERSEY AVE., CHICAGO 35, ILL.

Phone NATIONAL 2-4500

Branch Offices in New York, Philadelphia, St. Louis, Minneapolis, Detroit, Louisville, Milwaukee, Dallas and Los Angeles

Cellophane Tubes, Pouches, Bags and Envelopes—Polythene Bags—plain and printed. Also printed roll stock and sheets in Cellophane, Polythene, Acetate and Foil Utility Rolls, Holiday Bands and FLEXIBLE BARRIER MATERIALS

CONTRACOATER



**A REVERSE ROLL
COATER**

for the

coating of lacquers • resins • organosols •
plastisols • pigments • felt • fabric and film

Write for Bulletin DOM No. 5

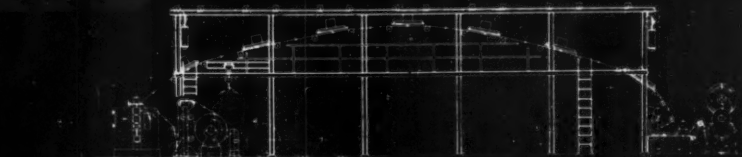
DILTS MACHINE WORKS, Fulton, New York

SHARTLE BROS. MACHINE CO., Middletown, Ohio • Divisions of THE BLACK-CLAWSON CO., Hamilton, Ohio
Northern Sales Office: 814 N. Superior St., Appleton, Wisc. • Southern Sales Office: 937 Coventry Road, Decatur, Georgia
Western Sales Office: Mayer Bldg., Portland, Oregon • Associate: THE ALEXANDER FLECK LIMITED, Ottawa, Ontario
Subsidiary: B-C INTERNATIONAL LTD., Greener House, 66/68 Haymarket, London, S. W. 1, England



K
KOHLEN SYSTEM
EQUIPMENT
•
PRODUCT OF DILTS

*TRADE-MARK



COMPLETE COATING INSTALLATIONS

FIRST FLEX-VAC



**IVERS-LEE packages these...
and many other drug and
pharmaceutical products with
FLEX-VAC materials
developed especially to meet
their needs.**



FLEX-VAC SALES

JERSEY CITY.....629 Grove St.
Journal-Square 2-3137
CHICAGO.....333 N. Michigan Ave.
ANDover 3-2771
LOS ANGELES.....2820 E. 12th St.
Angeles 7108

IVERS-LEE—the world's outstanding contract packagers for drug and pharmaceutical manufacturers—and designers of high precision automatic unit packaging machines—turns to FLEX-VAC to help meet the exacting demands of high speed production—product protection—and package sales appeal.

Typical of FLEX-VAC's achievements for IVERS-LEE and their customers are packages shown here—a crystal clear, highly moisture-resistant, tight-sealing lamination of plastic films to protect anti-acid tablets for months and months on the dealer's shelf—and the same material brilliantly printed for Sharp and Dohme's famous cough lozenges, Sucrets.

Notable too is the moisture-proof, scent-retaining special coated paper developed in the FLEX-VAC laboratories to give maximum shelf-life at low cost—and high package appeal—for the sampling campaign developed by IVERS-LEE for LORATE, distributed by Laboratories Division of Warner-Hudnut Co.

If you have a unit packaging problem or any flexible packaging problem—no matter what product you package—

TALK FIRST TO FLEX-VAC...

for no one has a wider range of functional packaging materials to choose from.

STANDARD CAP AND SEAL CORPORATION

GENERAL OFFICES: Chrysler Building, New York



Durofoil®

now safeguards
Nucoa's flavor!

Nucoa, one of America's most widely distributed margarines, is now dressed in sparkling Durofoil. And there's a good reason why! Like most distributors and producers of margarine, The Best Foods, Inc. recognized Shellmar's exclusive laminated foil wrap as a born salesman.

This sparkling wrap, printed in striking colors, gives any product a smart, confidence-inspiring look. Equally important, Durofoil protects flavor and quality every step of the way from manufacturer to consumer.

Durofoil is available in many combinations of materials and in many forms. Perhaps it is just the packaging material to give your product a brighter future. Your Shellmar Packaging Counselor can design a package that will pay off for you at point-of-purchase.

Shellmar Products Corporation • Mt. Vernon, Ohio
Plants: Mt. Vernon and Zanesville, Ohio • South Gate, Calif.
Mexico City • Medellin, Colombia • Sao Paulo, Brazil



 The Mark of Successful Package Creations



THESE PRODUCTS, TOO,
SELL FASTER IN

Durofoil



THE SHELLMAR PACKAGING COUNSELOR offers you a complete packaging service. His knowledge of packaging materials, design, printing, and fabrication is yours without obligation. Give him a call or write direct.